

Global Agriculture Information Network

Voluntary Report - public distribution

GAIN Report #CH9010

Date: 7/27/1999

# China, Peoples Republic of Food and Agricultural Import Regulations and Standards

1999

Prepared by:

Scott Reynolds U.S. Consulate General, Shanghai

Drafted by:

Chao/Hu/Jin/Lin/Moustakerski/Reynolds/Wei/Zhuang

# **Report Highlights:**

The Food and Agricultural Import Regulations and Standards Report provides a consolidated source of general information on technical requirements for food and agricultural imports into China. This report includes newly added important sections on China's Food Hygiene Law, Food Labeling Requirements, Food Additives Standards and "Green Food" (Organic Food) Standards.

GAIN Report #CH9010 Page 1 of 177

CHINA: FOOD AND AGRICULTURAL IMPORT REGULATIONS AND STANDARDS REPORT (FAIRS)

Updated on: JULY 30, 1999

Section(s) Added/Updated: I.B, ANX I.1, II.B, II.C, II.D, ANX II.2, III.A, ANX III.1, V.A, VI.A,

ANX VI.1, ANX VI.2, ANX VI.3, ANX VI.4, VII.B, APPENDIX A,

APPENDIX B

DISCLAIMER: This report has been prepared by the Agricultural Trade Office, Shanghai and the Office of Agricultural Affairs of the USDA/Foreign Agricultural Service in Beijing, China for U.S. exporters of domestic food and agricultural products. While every possible care was taken in the preparation of this report, information provided may not be completely accurate either because policies have changed since its preparation, or because clear and consistent information about these policies was not available. It is highly recommended that U.S. exporters verify the full set of import requirements with their foreign customers, who are normally best equipped to research such matters with local authorities, before any goods are shipped. FINAL IMPORT APPROVAL OF ANY PRODUCT IS SUBJECT TO THE IMPORTING COUNTRY'S RULES AND REGULATIONS AS INTERPRETED BY BORDER OFFICIALS AT THE TIME OF PRODUCT ENTRY.

NOTE: We welcome any comments, corrections, or suggestions about the material contained in this report. Please contact the Agricultural Affairs Office in Beijing or the ATO Shanghai; our e-mail addresses are: agbeijin@public3.bta.net.cn and atos@public.sta.net.cn.

GAIN Report #CH9010 Page 2 of 177

# **TABLE OF CONTENTS:**

I.	FOOD LA	AWS	Page 3 of 173
	A. SUMI	MARY AND COMMENTS ON THE FOOD HYGIENE LAW	Page 3 of 173
		CEDURES FOR SUPERVISION OF FOOD HYGIENE	
		FOOD HYGIENE LAW OF THE PEOPLE'S REPUBLIC OF CHINA	
II.	LABELIN	NG REQUIREMENTS	. Page 18 of 173
		KGROUND INFORMATION AND IMPLEMENTATION OF GB 7718-94	
		ELING OF CALORIES AND NUTRIENTS IN FOODS	
		ULATIONS FOR THE INVESTIGATION AND PUNISHMENT OF FOOD LA	
		LATIONS	
	D REGI	ULATIONS FOR ADMINISTRATION OF THE INSPECTION OF FOOD LA	RELS
		ACHED TO IMPORT AND EXPORT FOODS	
	ANX II.1		· 1 age 20 01 17. 18-94)
		THE GENERAL STANDARD FOR THE LABELING OF FOODS (GB//)	Dogo 28 of 177
	ANV II 2	LABELING OF FOODS FOR SPECIAL NUTRIENT (GB 13432-92)	Page 24 of 173
	ANA 11,2	LABELING OF FOODS FOR SPECIAL NUTRIENT (GB 13432-92)	. rage 34 of 17.
TTT	FOOD AD	ODITIVES REGULATIONS	Daga 30 of 173
111.		MARY AND COMMENTS ON GB 2760-1996	
		HYGIENIC STANDARDS FOR USES OF FOOD ADDITIVES (GB 2760-	
	ANA III.I	HIGIENIC STANDARDS FOR USES OF FOOD ADDITIVES (GB 2/00-	
•••			G
IV.	PESTICIL	DES AND OTHER CONTAMINANTS	. Page 96 of 173
V.	OTHER R	REGULATIONS AND REQUIREMENTS	Page 101 of 173
	A. CHIN	NA LAW ON THE ENTRY AND EXIT ANIMAL AND PLANT QUARANTIN	EPage 101 of 173
	ANX V.1	LAW OF THE PEOPLE'S REPUBLIC OF CHINA ON THE ENTRY ANI	D EXIT
		ANIMAL AND PLANT QUARANTINE	Page 102 of 173
VI.	OTHER S	SPECIFIC STANDARDS	Page 111 of 173
•		NA ORGANIC FOOD (GREEN FOOD) STANDARDS	
	ANX VI.1		
	ANX VI.2		
	ANX VI.3		
	741124 11.5	······································	· · · · · · · · · · · · · · · · · · ·
	ANX VI.4		
<b>X7TT</b>	CODVDIC	CHIE/ED A DEMA DIZ I A WC	D 1/5 -F 15/
V 11.		GHT/TRADEMARK LAWS	
		MARY AND COMMENTS	
	B. PENL	DING UPDATES	Page 165 of 17.
VII	I. IMPO	ORT PROCEDURE	Page 167 of 173
API	PENDIX A	- GOVERNMENT REGULATORY AGENCIES CONTACTS	Page 170 of 173
ΔPI	PENDIX R	- OTHER IMPORT SPECIALIST CONTACTS	Page 173 of 173
			- 450 110 OI 110

GAIN Report #CH9010 Page 3 of 177

#### I. FOOD LAWS

# A. SUMMARY AND COMMENTS ON THE FOOD HYGIENE LAW

The Food Hygiene Law of the People's Republic of China was promulgated by the President of the People's Republic of China on and with effect from October 30, 1995. The Law supersedes the Food Hygiene Law of the People's Republic of China (for Trial Implementation) promulgated by the Standing Committee of the National People's Congress on November 19, 1982. This Law is very similar to the previous law though it does contain numerous amendments. Among these are the removal of the requirement that food additives be produced in factories designated by government departments and the requirement that departments in charge of production shall be responsible for organizing special production of products and coatings that come into direct contact with food.

# **Applicability:**

The Law governs all food production and operation within the People's Republic of China. The Law also governs imported food, but explicitly states that food for export is subject to regulations separately formulated by the State Administration of Import and Export Commodity Inspection (SAIECI) and the Ministry of Public Health (MPH).

The Law applies to all food as well as additives, container, packing materials, instruments, equipment, detergents and disinfectants used in connection with food products. It also applies to the places, facilities and environment of food production and operations.

# **Definitions:**

Definitions of food, food additives, nutrients, food containers and packing materials, instruments and equipment, food production and operations and food producers and operators are provided in the Law. Notably:

- ! food is defined to include all kinds of products and raw materials which are for people to eat or drink and substances which in accordance with tradition are both food and medicine, but exclude substances used for treatment;
- ! food production and operations are defined to mean all production of food (not including crop cultivation and animal husbandry) and all activities in the gathering, buying, processing, storing, transporting, displaying, and the selling of food; and
- ! food production and operations are defined to mean all units or individuals engaged in food production and operations (including staff canteens and food pedlars).

#### **Administration:**

The State Council department in charge of hygiene (that is, the MPH) is vested with the responsibility for food hygiene supervision and management in the People's Republic of China. The MPH shall formulate, approve or promulgate state hygiene standards, measures for hygiene management, and rules for inspection.

The People's Governments of provinces, autonomous regions, and directly administered municipalities have the authority to set local hygiene standards for food which is not regulated by any state hygiene standards. The People's Governments at all levels shall encourage and support the improvement of food processing techniques and hygiene quality.

The departments in charge of food production and operations of the People's Governments at various levels shall

GAIN Report #CH9010 Page 4 of 177

strengthen their administration on food hygiene and monitor the compliance with this Law.

The hygiene administration departments of the People's Governments of provinces, autonomous regions and directly administered municipalities shall formulate administrative measures for granting hygiene permits, and may identify qualified units as food hygiene inspection units to carry out inspection and to issue inspection reports.

# **Imported Food:**

Imported food as well as additives, containers, packing materials, instruments and equipment used for food production must conform to state hygiene standards and hygiene management measures, and must be inspected by the hygiene supervision and inspection authorities at the entry ports prior to customs clearance. The importing units are required to provide inspection reports and relevant information on the pesticides, additives and fumigants used in the exporting countries.

Where there are no state hygiene standards on the imported food, the importing units must provide a hygiene appraisal issued by the health departments or authorities of the exporting countries. The imported food must then be examined and inspected by the hygiene supervision and inspection authorities at the entry ports and reported to the MPH for approval.

# **Export Food:**

The SAIECI is responsible for hygiene supervision an inspection of export food products. The Customs will release the foodstuffs for export on the strength of the certificates issued by the SAIECI.

# **Hygiene Requirements and Standards:**

Food shall be free of harm, contain the appropriated nutritional value as well as color, fragrance and taste.

The Law sets out the hygiene requirements which must be satisfied in both food processing and operations. The Law also lists out certain food which may not be produced. Food additives, containers, packing materials, instruments and equipment must conform to hygiene standards and hygiene management measures. Primary and supplementary foods intended especially for infants must observe the nutritional and hygiene standards set by the MPH.

# **Food Production and Operations:**

Food production and operation enterprises are required to implement a food hygiene control system for the entire work units and employ full-time or part-time food hygiene personnel. The site selection and design of construction, expansion and reconstruction projects of food production and operation enterprises shall meet with the hygiene requirements. The hygiene administration department must participate in the review of design and in project examination and acceptance.

Before producing products (such as food, additives, containers, packing materials, instruments and equipment) using new materials, information on the hygiene and nutritional values of the materials must be put forward and samples must be submitted for examination and approval in accordance with the food hygiene standards.

Food and food additives in fixed packaging must indicate clearly on their packages or product descriptions the information required under the Law. If the food is to be sold in the domestic market, such information must be written in Chinese.

GAIN Report #CH9010 Page 5 of 177

All personnel involved in food production and operations are subject to an annual health examination. New and temporary personnel must undertake a health examination to obtain a health certificate before commencement of work.

# **Hygiene Inspection:**

Before producing or selling their products, the producers of all food and related items must have the products successfully inspected in accordance with the hygiene standards and hygiene management measures. When purchasing food and their raw materials, food producers and operators shall, in accordance with the relevant state regulations, ask for the inspection certificates or laboratory reports from the sellers.

# **Hygiene Supervision:**

The hygiene administration departments of local People's Governments at county level or above shall perform the work of food hygiene supervision within the scope of their jurisdiction, and are also empowered to take certain emergency containment measures against food producers and operators where an incident of food poisoning has occurred or may possibly occur. The Law also sets forth the power and duties of food hygiene supervisors.

# **Hygiene Permit:**

Food production and operation enterprises and food pedlars must obtain a hygiene permit issued by the hygiene administration departments before applying for registration with the local administrations for industry and commerce. All food producers and operators are strictly prohibited from falsifying, correcting or lending their hygiene permits to others.

#### **Penalties:**

The Law puts into place a system of penalties for violation of the provisions, including the termination of production and operations, the confiscation of illegal income, the revocation of hygiene permits and the imposition of fines. Violators may be subject to civil compensation for causes of food poisoning or diseases and other harms. In serious cases, criminal liabilities may be brought.

**Note:** For the complete text of the Food Hygiene Law of the People's Republic of China, please see annex ANX I.1.

# B. PROCEDURES FOR SUPERVISION OF FOOD HYGIENE

The Procedures for Supervision of Food Hygiene were promulgated by the Ministry of Public Health (the 'MPH') on March 15, 1997 and entered into effect on June 1, 1997. The Procedures were formulated in accordance with the Food Hygiene Law of the People's Republic of China (the "Food Hygiene Law"), effective from October 30, 1995. The Procedures supercede the Procedures for Supervision of Food Hygiene (for Trial Implementation) and the Procedures for Administrative Penalties for Violation of the Food Hygiene Law of the People's Republic of China (for Trial Implementation).

# **Administration:**

The administrative departments for hygiene must abide by the Procedures when carrying out their duties in respect of food hygiene supervision. The scope of jurisdiction of the administrative departments for hygiene primarily involves the areas of food production and operation activities and the handling of incidents of food poisoning and contamination. The administrative departments for hygiene at all levels have the authority to carry out sampling and inspection of food within

GAIN Report #CH9010 Page 6 of 177

their respective areas of jurisdiction.

Food hygiene supervision organizations set up by the administrative departments in charge of railways and communications which carry out their duties in respect of food hygiene supervision must also comply with the Procedures, unless laws and regulations provide otherwise. Procedures for supervision of food hygiene for imported food at the entry ports will be formulated separately by the MPH.

# **Hygiene Permit:**

The administrative departments for hygiene of the People's Governments of the provinces, autonomous regions and municipalities directly under the central government must formulate measures for the issue and administration of hygiene permits. Hygiene permits must be issued in accordance with such measures.

The Procedures introduce an examination and approval system for all new food and food additive products which are produced with new resources and for new products such as food containers, packaging materials and utensils and equipment for food use which are produced with new materials. Only when approved may such new products be put into production.

The Procedures require that MPH examines and approves the product and manual of food which claims it has specified health care properties. Such examination and approval is to be conducted in accordance with the Measures for the Administration of Health Food which entered into effect on June 1, 1996. Food production and operation personnel must be trained in hygiene knowledge and undergo a medical examination. Examination and approval of food advertisements must be carried out in accordance with the Measures for the Control of Food Advertisements which entered into effect on October 1, 1993.

# **Supervision and Inspection:**

Food manufacturers and operators must submit the prescribed materials when applying for hygiene inspection in respect of site selection and design of new construction, extension or renovation projects. The administrative departments for hygiene must carry out an inspection and issue a written reply within 30 days of receipt of the application and relevant materials.

Food hygiene supervisors must produce their supervision certificates when carrying out supervision and inspection patrols. They must carry out such supervision and inspection in accordance with the provisions of laws. Regulations and the hygiene standards. Food hygiene inspection will focus on the following items:

- ! the hygiene permit, health certification and the knowledge and training of food production and operation personnel;
- ! the organization and system for the control of hygiene;
- ! the environmental hygiene, personal hygiene, hygiene of utensils and equipment for food use, food containers and packaging materials, hygiene facilities and technological processes;
- ! the hygiene of the food production and operation process;
- ! the food labels, manuals, obtaining of evidence of purchase of food and its raw ingredients;
- ! the sensory properties of the raw ingredients and semi-finished and finished foods etc., the use of food additives and hygiene inspection of foods;
- ! on-the-spot inspection and sampling in respect of the hygiene quality of food, tableware, drinking vessels and containers with food which is directly eaten from such containers;
- l hygiene of water; and

GAIN Report #CH9010 Page 7 of 177

! hygiene of detergents and disinfectants used.

The Procedures provide that food hygiene inspectors must issue a guiding opinion during the supervision and inspection patrols or after the supervision and inspection is completed. When administrative penalties need to be imposed, the Law on Administrative Penalties, the Measures for Administrative Penalties on Food Hygiene which entered into effect on March 15, 1997, and other relevant hygiene administrative penalties formulated by the MPH must be complied with.

# **Monitoring and Examination:**

The Procedures provide that when collecting samples of food, food additives, food containers and packaging materials, and detergents, disinfectants and utensils for food use, food hygiene supervisors must produce their working permit. Food hygiene supervisors may take such samples without compensation in accordance with the objective of the survey and the measures and standards for examination of food hygiene.

The food hygiene supervisors must submit the samples to examination personnel for examination. When receiving the samples, the examination personnel must sign a document which is called the sample examination notice. When the examination is completed, the examination personnel will submit and examination report to the food supervisor in charge of the matter. The examination report must be issued no later than 15 days after the sample examination notice was signed. Reports in connection with food that is or could potentially be poisonous should be issued within 5 days of signing the sample examination notice.

When inspected units disagree with the examination results, they may apply to the original administrative department for hygiene or the administrative department for hygiene at the next higher level.

# **Food Poisoning and Food Contamination:**

The Procedures state that after the administrative department for hygiene has received a report on an incident of food poisoning or contamination, it must immediately organize personnel to carry out an on-the-spot investigation. It may also adopt the following temporary control measures:

- ! to seal up for safekeeping the food and its raw ingredients which caused or may have caused the food poisoning;
- ! to seal up for safekeeping any contaminated utensils and equipment for food use and order the carrying out of clean-up and disinfection.

The Procedures provide that the administrative department for hygiene must complete an examination or hygiene evaluation within 15 days of sealing up the food and the utensils and equipment for food use. It must take one of the following decisions:

- ! to destroy contaminated food;
- ! to unseal non-contaminated food and utensils and equipment for food use which have been disinfected.

GAIN Report #CH9010 Page 8 of 177

# ANX I.1 FOOD HYGIENE LAW OF THE PEOPLE'S REPUBLIC OF CHINA

#### **CHAPTER 1:** General Provisions

**Article 1** This Law is instituted in order to ensure food hygiene, to guard against food contamination, to prevent harmful factors from doing harm to human body, to safeguard people's physical health and to build up people's constitution.

- **Article 2** The state puts into effect the supervisory system of food hygiene.
- **Article 3** The Public Health Administration of the State Council is responsible for the national supervision and control over food hygiene.

The other related departments of the State Council are responsible for the control work of food hygiene within the limits of their respective duties.

**Article 4** Those who are engaged in the production and business operation of food within the Territory of the People's Republic of China shall abide by this Law.

This Law is applicable to all foods, food additives, food containers, packaging materials, food tools, equipment, detergents and disinfectants. Also it is applicable to the production and business places, facilities and related environment of food.

**Article 5** The State encourages and protects social organizations and individuals to exercise social supervision over food hygiene.

Anyone has the right to inform against or accuse any act in violation of this Law.

# CHAPTER 2: Food Hygiene

- **Article 6** Food shall be nontoxic and harmless. It shall conform to the due nutritional requirements, and have corresponding organoleptic properties in color, flavor and taste.
- Article 7 Staple food and non-staple foodstuffs especially for infants and children shall conform to the nutritional and hygienic standards instituted by the Public Health Administration of the State Council.
- **Article 8** The entire course of production and business operation of food shall meet the following hygienic requirements:
- (1) Keep the environment clean and tidy, inside and outside, and adopt effective measures to eliminate flies, rats, cockroaches, and other harmful insects as well as their multiplying condition. Food shall be kept a prescribed distance away from any places where poisonous or harmful substances exist.
- (2) The production and business enterprises of food shall have enough premises or places to match with the varieties and quantity of products for treatment of raw materials as well as for processing, packing and warehousing food.

GAIN Report #CH9010 Page 9 of 177

(3) There should be sufficient facilities for disinfection, locker rooms, lavatories, day-lighting, ventilation, preservation from decay, dust prevention, fly prevention, rat prevention, washing, sewage discharge, and garbage disposal.

- (4) There should be rational equipment layout and process flow, so as to prevent cross-contamination among food to be processed, ready-to-serve food, raw materials and products. Food shall not have access to poisonous and dirty things.
- (5) Tableware, drinking utensils and food containers must be washed clean and disinfected before use. Cooking utensils and other utensils must be washed and kept clean after use.
- (6) The conditions for warehousing, transporting and loading/unloading food containers, packaging materials, food tools and equipment must be safe and harmless; so as to keep them clean and to prevent food contamination.
- (7) Ready-to-serve food shall be packed in small packages or with non-toxic and clean packaging materials.
- (8) The food production and business personnel shall always keep personal hygiene. At the time of producing or selling food, they must wash hands and wear clean work clothes and caps. At the time of selling ready-to-serve food, they must use serving utensils.
- (9) Water consumption shall comply with the state-specified hygiene standards for urban and rural drinking water.
- (10) Detergents and disinfectants to be used shall be safe and harmless to human body.

The hygienic requirements for street food peddlers and urban/rural fair traders of food in the entire course of food production and business operation will be concretely stipulated by the standing committee of the provincial, autonomous regional, or municipal people's congress according to this Law.

# **Article 9** Production and business operation of the following foods are forbidden:

- (1) Those which are putrid, deteriorating, oil-rancid, moldy, worm-eaten or dirty; or mixed with foreign matter; or abnormal in organoleptic properties to the possible detriment of human health.
- (2) Those which contain toxic or harmful substances, or those which are contaminated by toxic or harmful substances to the possible detriment of human health.
- (3) Those which contain pathogenic parasites or microorganisms, or whose content of microbial toxin exceeds the state-specified standard.
- (4) Meats and meat products which have not been inspected by a veterinarian or are substandard through inspection.
- (5) Poultry, livestock, beasts and aquatic animals which have died of illness or poison or of an unknown cause; and their products.
- (6) Those which are contaminated by dirty or seriously damaged containers or packaging materials, or by unclean means of transport.
- (7) Those which are adulterated or imitated, thus affecting their nutrition and hygiene.
- (8) Those which are processed with non-food materials or added with non-food chemical substances; or those non-food products used as foods.
- (9) Those which exceed the shelf life.
- (10) Those which are especially forbidden for sale by the Public Health Administration of the State Council or by the provincial, autonomous regional or municipal people's government due to special needs for preventing diseases, etc.
- (11) Those which contain such additives that are used without ratification from the Public Health Administration of the State Council, or those which contain residual pesticide in excess of state-specified allowance.
- (12) Other foods which fail to meet the food hygiene standards and hygienic requirements.

**Article 10** Medicines shall not be added to food except for those which are both foods and medicine according to

GAIN Report #CH9010 Page 10 of 177

tradition and can thus be added to foods as raw materials, seasonings or nutrition enhancers.

# **CHAPTER 3:** Hygiene of Food Additives

Article 11 Production, business operation and use of food additives shall conform to stipulations in hygiene standards and hygienic control procedures for the use of food additives. Those food additives which fail to meet hygiene standards and hygienic control procedures shall not be dealt in and used.

# **CHAPTER 4:** Hygiene of Food

Containers, Packaging Materials, Food Tools and Equipment

**Article 12** Food containers, packaging materials, food tools, and equipment shall conform to stipulations in hygiene standards and hygienic control procedures.

**Article 13** Production of food containers, packaging materials, food tools and equipment shall adopt raw materials which can meet hygiene requirements. These products shall be easy to clean and disinfect.

# CHAPTER 5: Institution of Standards and Control Procedures for Food Hygiene

- **Article 14** State hygiene standards, hygienic control procedures and inspection rules for food, food additives, food containers, packaging materials, food tools and equipment as well as for detergents and disinfectants used to clean food, food tools and equipment and also for food allowance of pollutants and radioactive substances shall all be instituted or promulgated by the Public Health Administration of the State Council.
- **Article 15** The provincial, autonomous regional, and municipal people's governments may institute local hygiene standards for those foods which are not covered by state hygiene standards. These local hygiene standards shall be submitted to the Public Health Administration of the State Council for the record.
- **Article 16** The hygienic targets in the state product quality standards for food additives are subject to examination and approval by the Public Health Administration of the State Council.

The safety evaluation of agricultural chemicals like pesticides, fertilizer, etc. is subject to examination and approval by the Public Health Administration of the State Council.

The veterinary hygienic inspection rules for slaughtering livestock and poultry shall be instituted by the related administration of the State Council together with the Public Health Administration of the State Council.

# **CHAPTER 6:** Control over Food Hygiene

**Article 17** The food production and operation administrative departments of the people's governments at all levels shall strengthen the control over food hygiene and inspect the implementing conditions of this Law.

The people's government at all levels shall encourage and support the improvement of food processes as well as

GAIN Report #CH9010 Page 11 of 177

promote the enhancement of food hygienic quality.

**Article 18** Food production and business operation enterprises shall perfect their food hygiene control system and designate full-time or part-time food hygiene controllers to strengthen the inspection work of foods in production and business operations.

- **Article 19** The site selection and design of a project for new building, extending or renovating a food production or operation enterprise shall conform to hygienic requirements. The public health administrative department shall take part in the design examination and project commissioning.
- **Article 20** For food that is to be produced by utilizing a new resource or for a new variety of food additive, the production and business operation enterprise shall submit necessary data of its hygienic appraisal and nutritional appraisal before the product is put into production. For food containers and packaging materials that are to be produced by utilizing new raw materials or for new varieties of food tools and equipment, the production and business operation enterprises shall submit necessary data of their hygienic appraisal. Samples of the above new varieties shall be provided and their examination and approval procedures on the basis of the stipulated standards for food hygiene shall be gone through before new varieties are put into production.
- **Article 21** The approved packaged foods and food additives shall indicate their respective product name, origin, factory name, production date, lot number or code, specifications, formula or main ingredients, shelf life, directions, etc. on the label or in the instruction leaflet of each product. There shall be no exaggerated or false information for publicity in the product instruction leaflets of foods and food additives.

Food labels shall be clear and legible. Foods sold in the domestic market shall have labels in Chinese.

- **Article 22** For foods with specific health care functions, their products and instruction leaflets are subject to examination and approval by the Public Health Administration of the State Council while their hygiene standards and their production and operation control procedures shall be instituted by the Public Health Administration of the State Council.
- **Article 23** Food with specific health care functions shall not be harmful to human health. Their product instruction leaflets shall have authentic information. The functions and ingredients of a product shall accord with those stated in its instruction leaflet without falsehood.
- **Article 24** For foods and food additives as well as food for food containers, packaging materials and other utensils; these products shall not be delivered ex-factory or sold until they have passed the inspection implemented according to the hygiene standards and the hygienic control procedures.
- **Article 25** The food production and operation enterprises shall ask for certificates of inspection or laboratory test reports for foods and raw materials to be purchased according to related stipulations of the state. Sellers shall guarantee to provide them. The scope and kinds of these required certificates and reports are laid down by the public health administrations of the provincial, autonomous regional, and municipal people's governments.
- **Article 26** Food production and operation personnel shall accept a health check-up every year. New employees

GAIN Report #CH9010 Page 12 of 177

and temporary workers shall also accept a health check-up, and they shall not fill their posts until their health certificates are issued.

Those who suffer from infectious diseases in the digestive tract like dysentery, typhoid fever, viral hepatitis, etc. (including pathogenic bacteria), active tuberculosis, pyogenic or escudative dermatosis, and other diseases harmful to food hygiene, shall not do jobs in direct contact with foods.

**Article 27** The food production and operation enterprises as well as street food peddlers shall first obtain the hygiene permit issued by the public health administration and then apply for registration with the administration for industry and commerce. Those who have not obtained the hygiene permit shall not be engaged in food production and business operation.

The food production and operation enterprises as well as street food peddlers shall not forge, alter or lend the hygiene permit.

The issuance and control procedures of the hygiene permit are instituted by the public health administrations of the provincial, autonomous regional, and municipal people's governments.

- **Article 28** Sponsors of different kinds of food markets shall be responsible for the food hygiene control work inside the market, and set up necessary public sanitary facilities inside the market so as to maintain fine environmental sanitation.
- **Article 29** The administration for industry and commerce shall take charge of the food hygiene control work for the urban and rural fair trade while the public health administration shall be responsible for the supervision and inspection work of food hygiene.
- **Article 30** Imported foods, food additives, food containers, packaging materials, food tools and equipment shall all conform to stipulations in the hygiene standards and hygienic control procedures of the State.

The hygienic supervision and inspection of the above imported products shall be made by the port importation supervisory and inspection organ for food hygiene. Their importation is not permitted until the above products have passed the inspection. The Customs will release such products upon presentation of the certificate of inspection.

At the time of application for inspection, the import unit shall provide data and the inspection reports concerning pesticide, additives, fumigants, etc. used in the export country (or region).

The above imported products shall be inspected according to the state hygiene standards. If there is no such state hygiene standards, the import unit shall provide the hygienic evaluation data issued by the public health department or organization in the export country(or region) which will be submitted to the Public Health Administration of the State Council for ratification after being examined and inspected by the port importation supervisory and inspection organ for food hygiene.

**Article 31** The state import/export commodities inspection authorities shall be responsible for the hygienic supervision and inspection of import foods. The Customs will release such foods upon presentation of the certificate of

GAIN Report #CH9010 Page 13 of 177

inspection issued by the state import/export commodities inspection authorities.

# **CHAPTER 7:** Supervision over Food Hygiene

**Article 32** The public health administration of the people's government at the country-level or upwards shall exercise its supervisory duties of food hygiene within its jurisdiction.

The food hygiene supervisory organs set up by the competent administrations under the Ministry of Railways and the Ministry of Communications shall exercise the food hygiene supervisory duties laid down by the Public Health Administration of the State Council together with the related department of the State Council.

# **Article 33** The food hygiene supervisory duties are:

- (1) Conducting supervision, testing, inspection and technical guidance of food hygiene.
- (2) Assisting the training of food production and operation personnel, and supervising their health check-up.
- (3) Publicizing food hygiene and nutritional knowledge, unfolding the public appraisal of food hygiene and publishing food hygiene conditions.
- (4) Making a hygienic examination of the site selection and design of a project for new-buildings, extending or renovating a food production or operation enterprise; and taking part in the project commissioning.
- (5) Investigating into the food poisoning and food contamination accidents, and adopting control mechanisms.
- (6) Going on a tour of supervising and examining any acts in violation of this Law.
- (7) Investigating and affixing the responsibility for any act in violation of this Law, and inflicting a disciplinary punishment according to this Law.
- (8) Being responsible for other food hygiene supervisory matters.

**Article 34** Food hygiene supervisors shall be appointed by the public health administration of the people's government at the county-level or upwards. Their office shall be assumed by qualified professionals. The public health administration at the same level shall issue a certificate of appointment to every food hygiene supervisor.

The competent administrations under the Ministry of Railways and the Ministry of Communications shall issue a certificate of appointment to every food hygiene supervisor under their leadership.

**Article 35** Food hygiene supervisors shall carry out the tasks assigned by their respective public health administration.

Food hygiene supervisors shall impartially execute this Law, be devoted to their own duties and never utilize their functions and powers to seek personal gain. At the time of carrying out their tasks, food hygiene supervisors may understand the circumstances and ask for necessary data from the food production and operation enterprises. They may enter the production and business operation places for inspection and free sampling as stipulated. The food production and operation enterprises shall not refuse of withhold the truth.

Food hygiene supervisors shall be responsible for keeping absolutely secret the technical data provided by the food production and operation enterprises.

Article 36 The public health administration of the State Council and of the provincial, autonomous regional, and

GAIN Report #CH9010 Page 14 of 177

municipal people's government may, according to actual need, select qualified organizations as the food hygiene inspection units to make food hygiene inspections and to issue the inspection reports.

**Article 37** The public health administrations of the people's government at the county-level or upwards may adopt the following temporary control measures against the food poisoning accidents caused or possibly caused according to evidence by the food production and operation enterprises:

- (1) To seal up those foods and their raw materials which have caused or possibly caused food poisoning.
- (2) To seal up the contaminated food tools and utensils, and to order that these tools and utensils be cleaned and disinfected.

After being inspected, the contaminated foods shall be destroyed while the uncontaminated foods are unsealed.

**Article 38** The unit where the food poisoning occurs and the organization which receives patients for treatment, besides the rescue measures to be taken, shall report the accident to the public health administration in the locality in time according to relevant state stipulations.

As soon as the above report is received by the public health administration of the people's government at the country-level or upwards, it shall make timely investigation and treatment as well as adopt effective control measures.

# **CHAPTER 8:** Legal Liabilities

Article 39 In the case of producing and dealing in foods which fail to meet hygiene standards in violations of the provisions of this Law and thus causing a food poisoning accident or any other food-origin diseases, such a production or business operation shall be stopped and such foods be destroyed. Simultaneously, all the gains from violation of this Law shall be confiscated, and a fine of more than the amount of such gains up to less than five times the amount may be imposed on the violator. For a violator who obtains no gains from violation of this Law, a fine of more than one thousand yuan up to less than fifty thousand yuan may be imposed on him.

In the case of producing or dealing in foods which fail to meet hygiene standards in violation of the provisions of this Law and thus causing a serious food poisoning accident or any other serious food-origin diseases to the serious detriment of human health, or in the case of adulterating foods with toxic or harmful non-food materials in the course of production or business operations; a criminal liability shall be investigated according to law.

Should one of the above acts occur, the hygiene permit shall be revoked.

Article 40 Any illegal food production and operation activities engaged in without obtaining the hygiene permit or by forging the hygiene permit shall be banned, and the illegal gains shall be confiscated. Simultaneously, a fine of more than the amount of such gains up to less than five times the amount may be imposed on the violator. For a violator who obtains no illegal gains, a fine of more than five hundred yuan up to less than thirty thousand yuan may be imposed on him. Should the hygiene permit be altered or lent, this hygiene permit shall be confiscated together with illegal gains; and, moreover, a fine of more than the amount of the illegal gains up to less than three times the amount may be imposed on the violator. For a violator who obtains no illegal gains, a fine of more than five hundred yuan up to less than ten thousand yuan may be imposed on him.

GAIN Report #CH9010 Page 15 of 177

**Article 41** In the course of food production and operation, any acts in violation of this Law which fail to meet hygienic requirements shall be ordered to make corrections. Besides, a disciplinary warning shall be given and a fine under five thousand yuan may be imposed upon the violator. Should such corrections be refused or should the case be serious, the hygiene permit shall be revoked.

- **Article 42** Should any foods, which are forbidden to produce or deal in, be produced or dealt in violation of the provisions if this Law; such a production or business operation shall be stopped and the sold foods be taken back for destruction immediately through an announcement. The illegal gains shall be confiscated and a fine of more than the amount of such gains up to less than five times the amount may be imposed on the violator. For a violator who obtains no illegal gains, a fine of more than one thousand yuan up to less than fifty thousand yuan may be imposed on him. Should the case be serious, the hygiene permit shall be revoked.
- **Article 43** In the case of producing or dealing in staple food and non-staple foodstuffs especially for infants and children which fail to meet the nutritional and hygienic standards in violation of the provisions of this Law, such a production or business operation shall be stopped and the sold foods be taken back for destruction immediately through an announcement. The illegal gains shall be confiscated, and a fine of more than the amount of such gains up to less than five times the amount may be imposed on the violator. For a violator who obtains no illegal gains, a fine of more than one thousand yuan up to less than fifty thousand yuan may be imposed on him. Should the case be serious, the hygiene permit shall be revoked.
- **Article 44** In the case of producing or dealing in or using the food additives, food containers, packaging materials, food tools, equipment, detergents and disinfectants which fail to meet stipulations in the hygiene standards and hygienic control procedures in violation of the provisions of this Law; such a production or business operation or use shall be stopped and the illegal gains be confiscated. Besides, a fine of more than the amount of such gains up to less than three times the amount may be imposed on the violator. For a violator who obtains no illegal gains, a fine under five thousand yuan may be imposed on him.
- Article 45 In the case of producing or dealing in the food with specific health care functions without examination and approval by the Public Health Administration of the State Council, or if its instruction leaflet contains false information in violations of the provisions of this law; such a production or business operation shall be stopped and the illegal be confiscated. Besides, a fine of more than the amount of such gains up to less than five times the amount may be imposed on the violator. For a violator who obtains no illegal gains, a fine of more than one thousand yuan up to less than fifty thousand yuan may be imposed on him. Should the case be serious, the hygiene permit shall be revoked.
- Article 46 In case the production date, shelf life and other prescribed items are not indicated or are falsely indicated on the label or in the instruction leaflet of the approved package food or food additive in violation of the provisions of this Law, or in case there is no such label in Chinese as laid down by this Law; such a default shall be ordered to be corrected and a fine of more than five hundred yuan up to less than ten thousand yuan may be imposed on the violator.
- **Article 47** If, in violation of the provisions of this Law, the food production and operation personnel should fill their posts without obtaining their health certificates, or if those food production and operation employees, who suffer from such diseases that are forbidden to get into direct contact with food, should still not be transferred away; such acts shall be corrected and a fine under five thousand yuan shall be imposed on the breaching organization.

GAIN Report #CH9010 Page 16 of 177

**Article 48** Those who have caused a food poisoning accident or any other food-origin diseases in violation of the provisions of this Law, or those who have brought other people any harm or damage due to their other acts in violation of this Law, shall bear civil compensation liabilities according to law.

- **Article 49** The administrative punishments specified in this Law shall be decided upon by the public health administration of the people's government at the county-level or upwards. Other organs which are specified by this Law to exercise their food hygiene supervisory power shall make decisions upon administrative punishments within the limits of their duties in accordance with the provisions of this Law.
- **Article 50** A person (or an organization) concerned, who (or which) disagrees with an administrative punishment decision, may apply for a reconsideration to the next higher organ of the organ which receipt of the notice thereof. The person (or organization) concerned may also directly file a suit with a people's court within 15 days from the receipt of the punishment notice.

The reconsideration organ shall make a reconsideration decision within 15 days from the receipt of the reconsideration application. If the person (or organization) concerned refuses to accept the decision made after such reconsideration, he (or it) may file a suit with a people's court within 15 days from the receipt of the reconsideration decision.

In case the person (or organization) concerned fails to apply for a reconsideration, to file a suit with a people's court or to fulfill the punishment decision within the prescribed time limit; the organ which makes the administrative punishment decision may apply to the related people's court for enforcement.

- **Article 51** If the public health administration should issue the hygiene permit to an unqualified producer or business operator in violation of the provisions of this Law, the direct person-in-charge shall be given a disciplinary sanction. Where the act constitutes a crime through bribery, criminal liability shall be investigated according to Law.
- **Article 52** Should any food hygiene supervisor abuse his power of office, neglect his duties, or practice favoritism or other irregularities, or bring about a grave accident; criminal liability shall be investigated according to law provided that such as act has constituted a crime, or a disciplinary sanction shall be given in case such act does not constitute a crime.
- **Article 53** Where a food hygiene supervisor is hindered from performing his duties according to law by violence or menace, criminal liability shall be investigated according to law. Where a food hygiene supervisor is stopped or hindered from performing his duties according to law without using violence or menace, a punishment shall be given by the public security organ according to the Punishment Regulation on Public Order Control.

# **CHAPTER 9:** Supplementary Provisions

**Article 54** Definitions of the following terms in this Law:

Food: It refers to the finished product or raw material to be eaten or drunk by people. It may also refer to a product or raw material which is traditionally both a food and a medicine except those which are used for medical treatment.

Food additives: They refer to those synthetic chemicals or natural materials which are added to food for improving its quality, color, flavor and taste as well as for the needs of preservation from decay and processing technology.

GAIN Report #CH9010 Page 17 of 177

Nutritive enhancers: They refer to those natural or synthetic food additives which belong to the scope of natural nutrients and which are added to food for enhancing nutrient content.

Food containers and packaging materials: They refer to those products made of paper, bamboo, wood, metals, enamel, pottery, porcelain, plastic, rubber, natural fibre, synthetic fibre, glass and food coatings for packaging and placing food.

Food tools and equipment: They refer to those food machinery, pipelines, conveyers, container, utensils and tableware which are used in the course of food production and business operation.

Food production and (business) operation: They refer to all the food production and operation activities, including production, collection, purchase, processing, storage, transportation, display, supply and sales (but excluding the plantation and breeding trades).

Food producers and operators: They refer to all the units and individuals engaged in food production and operation, including employees' mess and street food peddlers.

**Article 55** The control procedures on export foodstuffs shall be separately instituted by the state import and export commodities inspection authorities together with the Public Health Administration of the State Council and related administrative department.

**Article 56** The food hygiene control procedures on military food stuffs and self-supply foodstuffs shall be instituted by the Military Commission of the Central Committee according to this Law.

**Article 57** The present Law is promulgated for implementation as of the promulgation date and the "Food Hygiene Law of the People's Republic of China (For Trial Implementation)" is simultaneously annulled.

GAIN Report #CH9010 Page 18 of 177

# II. LABELING REQUIREMENTS

# A. BACKGROUND INFORMATION AND IMPLEMENTATION OF GB 7718-94

# 1. Chinese Food Labeling Law - Summary

Although the food labeling law, referred to as the "General Standard for the Labeling of Foods", went into effect on February 1, 1995, it was only for Chinese-produced packaged foods. Before long, an extension was granted to imported pre-packaged foods, but not until September 1, 1996 did the Chinese government apply the standard to imported foods. At that time, the government widely distributed a circular notification stating that all kinds of imported packaged foods not meeting the standards of the Chinese labeling law would be refused entry to China. It also required that modified compliance with temporary adhesive labels would also no longer be allowed.

However, in reality, many labels for pre-packaged foods in China still look like "magic boxes" puzzling common consumers both in terms of non-Chinese language and the incomplete or misleading fundamental elements which are required to be included on the labels by the law. Very few spot checks on food labels were carried out by the government and the violators were generally not severely punished. The main reason for this could probably be attributed to the government's worry over exerting too much pressure on Chinese manufacturers in changing old labels. Nevertheless, we strongly encourage American suppliers of pre-packaged foods to carefully study all the regulations stipulated by this law and try to follow the law in every detail, as we predict that the Chinese authority concerned will gradually better its performance in enforcing this law in the future.

# 2. China's New Food Labeling Law - Introduction

Each commodity for sale shall have a label to show and explain its features and properties. Since labels convey necessary information to consumers, labeling has become a foundation for fair business practice and competition. Food labels have become more important than labels for other commodities, because foods have a direct bearing on consumers' health and safety.

China's new food labeling law was laid down for pre-packaged food and beverage products to be marketed in China, including frozen foods, pre-packaged meats, special nutrient foods and alcoholic beverages. The law requires food labels to be truthful, precise, and consistent with other Chinese laws and standards. The law only applies to labels on "delivery units" that are pre-packaged for retail sales. The law does not affect "shipping units" and packaged foods sold for institutional use, nor does it apply to bulk foods, fresh produce, pharmaceutical foods and tonics.

Before the first Chinese labeling law GB 7718-87 was put into effect, the Chinese food labeling system had been in an anarchical state for a long time. There were many problems with domestically-produced and imported pre-packaged foods being sold in the market at that time. Labels found on many foods often lacked basic information such as the production date or quality guarantee period/ storage period, ingredient list and manufacturer's name and address. Some manufacturers even made use of labels to do exaggerated or false advertising.

In order to protect consumers' safety and health as well as the legal rights and interests of food manufacturers, as of September 1, 1996, all pre-packaged foods for retail sale in China, including both domestic and imported food products were officially required to comply with China's new food labeling law, referred to as the "General Standard

GAIN Report #CH9010 Page 19 of 177

for the Labeling of Foods" (GB7718-94). This law was promulgated by the State Bureau of Technical Supervision, and closely follows standards recommended by the FAO and World Health Organization's CAC (CODEX STAN 1-1991). It went into effect for Chinese-produced pre-packaged foods on February 1, 1995. The extension granted to imported pre-packaged foods also stipulates that as of September 1, 1996, temporary adhesive labels (Chinese language stickers) would also be forbidden.

# Implementation of the Chinese Food Labeling Law

To better understand the actual formalities for applying for a new Chinese label for imported pre-packaged foods, ATO Shanghai interviewed several imported food manufacturers, importers, distributors and supermarkets in Shanghai, such as Inchcape Marketing Services, Polybrands International Ltd., Hershey Foods Corporation, Montrose Food & Wine and City Shopping Service Co.(City Supermarket) and tried to find out the truth behind the veil of the governmental regulations.

In the light of the new Chinese food labeling law, manufacturers or their distributors of any imported pre-packaged foods without Chinese labels on their packages, but in compliance with The General Standard for the Labeling of Foods (GB7718-94) and the other necessary regulations prescribed by the State Bureau of Technical Supervision can apply to the State Health Quarantine Bureau and the Secretariat of the National Food Industry Standardization Technology Commission under the State Bureau of Technical Supervision for the entry of their products into the Chinese market. After a preliminary examination, a quadrupled application form needs to be filled out along with a sample of a newly-designed Chinese label in accordance with the requirement set for a standard label for imported prepackaged foods. All these materials should then be submitted to the local Health Quarantine Center of Imported foods for approval. Another quadrupled application form will then be filled up by the local Health Quarantine Center and submitted to the State Bureau. The State Bureau will jointly work out the appraisal with the State Bureau of Technical Supervision and notify the local Health Quarantine Center of Imported Foods about the result of the appraisal. Provided that the application was approved, the State Health Quarantine Bureau would issue a public notice granting an approval to the applicant allowing him to use the approved Chinese labels on their products.

In reality, it is not easy for a western company to change its labels, especially when it starts to explore the Chinese market with a limited number of products on a trial basis in the very beginning. However, it is a lot easier for a Hong Kong company such as Inchcape Marketing Services and Polybrands International Ltd. to get a new Chinese food label approved by the Chinese government. Since these companies also sell the same products in Hong Kong, they usually just translate the English labels into Chinese and then submit these new Chinese labels with attached application forms to the Chinese local authorities concerned. For example, Polybrands got their labels approved in Guangzhou while Inchcape applied to Shanghai. Usually one application case takes about one year's time to get the final approval from the Central Government level, but people just can not bear such a long time without products sales. The only way to stretch the rules is that the applicant pays a certain amount of money, averaging RMB400 yuan for each commodity label and buys a permission stamp for his application form. With that chop on his form, he is again allowed to use temporary Chinese stickers for his products before the date he gets his final approval from the government.

# 4. The Future of the Chinese Food Labeling Law

According to the Division of Standardization under the Shanghai Bureau of Technical Supervision, only the State Bureau of Technical Supervision in Beijing has the right to give approval on the application of permanent Chinese labels GAIN Report #CH9010 Page 20 of 177

for imported pre-packaged foods, but they heard from a well-informed source that this right will soon be transferred to a lower local level such as Shanghai Imported Foods Health Testing Center. Generally speaking, the application of the Chinese label for imported pre-packaged foods is taken at the receiving port through which the product will normally be imported.

In the future, the Bureaus of Technical Supervision at different levels will send investigation teams to check marketplaces within their coverage at random about the implementation of the Chinese food labeling law once or twice a year only. Between the two yearly investigations, the teams will only work on issues resulted from consumers' complaints. The Shanghai local bureau organizes spot checks. Although the offenders thought that one was rather strictly handled, the Chinese side considered that was only a salutary warning, a very merciful trial. As a result, some first violators (mostly wine dealers) were exposed to the public without any reserve and were penalized with a fine ranging from 15 to 20% of the total sales volume of each violating product. A few of them forfeited their products by the offence against the law.

It appears to us that the spot check in recent years were not too onerous and the Chinese government was not so resolute in enforcing this law in a very strict way. There are likely two reasons for this: one could be the government thinks that the law, overall speaking, has been carried out quite smoothly so far and it doesn't want to overdo itself in this field in an unreasonable way. The other reason could be that it does not plan to impose too heavy a financial burden on manufacturers. This could be verified by the following example. During the past campaign for complying with "General Standard for the Labeling of Food" (GB7718-87), Chinese manufacturers incurred a huge loss totaling nearly RMB27 million yuan. Now the government is inclined to focus more on the posterior consequences and responsibilities brought forth by specific complaints and actual damages rather than regular checks and investigations in the marketplace.

Regarding the temporary adhesive label stickers, we were also informed by the local Bureau of Technical Supervision that for the time being, temporary stickers are still allowed especially for brand new food products entering the Chinese market first time, but only for stating the name of the food and name and address of the manufacturer, but never for the date of production and quality guarantee period or storage period. Anyhow, they did not specify how long that allowance of use would last.

In the future, pre-packaged foods will be distinguished between the foods as mere exhibits and as commodities for sale in exhibition events. If they are mere exhibits, they do not necessarily need Chinese labels on them, but if they are meant for shelves in a shopping background, they are required by the law to be labeled in Chinese. This practice also applies to those manufacturers or distributors of imported pre-packaged foods if they want to bring in any new products to test marketability.

# 5. The New Regulation on the Chinese Food Labeling Law

The State Administration Bureau of Quality & Technical Supervision released a notice on November 6, 1998, that Article 5.2.2 of the Food Labeling Law will be amended effective on January 1, 2000.

The new article stipulates that "5.2.2 Various ingredients must use specific names per stipulations contained in Article 5.1. Food additives must use the product names or variety names as provided in GB2760. <u>Therefore</u>, <u>sweetener</u>, preservative and color must use specific names."

GAIN Report #CH9010 Page 21 of 177

Explanation: The Secretariat of the National Food Industry Standardization Technology Commission mentioned to all food manufacturers, home and abroad, and distributors of imported food that all food labels for pre-packaged food sold in China since January 1, 2000, must use specific names of food additives as provided in GB2760. For example, at present food additives such as Saccharin Sodium, Benzoic Acid, and Caramel Color, can be referred to as sweetener, preservative, and color respectively. But as of January 1, 2000, must be referred to as Saccharin Sodium, Benzoic Acid, and Caramel Color.

6. The following are translated highlights from an article in Shanghai Food News on May 22, 1997 describing the situation in the market at that time:

"When you enter an emporium in China, your eyes will be feasted by the endless array of beautiful collections of different food commodities, but if you take a careful look at the labels on those products, it is not difficult for you to find that there are probably too many "riddles" on the labels for you to solve. Many labels for pre-packaged foods still seem to be very hard to figure out as if they were "magic boxes" designed to puzzle the common consumers.

At present, there are quite a few problems with pre-packaged food labels, but they may be summarized as follows:

1) The labeled name of a food product probably does not match the real food:

Some Chinese-produced foods often borrow foreign languages to name themselves and tend to use some strange and exotic nouns as their trade marks in order to pass the products off as imports to fool consumers. Some manufacturers even employ some vague concepts in their labels or instructions to confuse consumers intentionally. Very often you may discover that even some shop assistants who have been selling certain products for a long time still cannot figure out whether these labels on them are meant to serve as the names of the products or the trade marks, or the names of the manufacturers or distributors.

2) Some labels are still found either short of basic information or inaccurate and misleading in nature:

Based on the law, the fundamental elements which are stipulated to be listed on labels should include:

- ! Name of the food
- ! Ingredient list
- Name and address of manufacturer or distributor
- ! Net contents
- ! Country of origin
- ! Date of production
- ! Quality guarantee period and/or storage period

In reality, some of the labels found in the marketplace still fall short of the above-mentioned elements. Names and addresses of manufacturers or distributors tend to be unclearly labeled or purposely concealed. Some of them are usually replaced by some names of a certain region or a geographic area. Nowadays, this practice almost prevails as a trend. Some labels print neither the information such as the name or address of a foreign manufacturer nor do they print anything about the domestic distributor or agent. The only information they might wish to put on is something that usually

GAIN Report #CH9010 Page 22 of 177

look very general and vague, such as "Made in Singapore or Made in Hong Kong" or even as simple as "Made by Sino-Chinese Joint Venture".

# 3) Food additives applied are often held back on purpose:

Some ingredient lists in food labels purposely conceal the truth that preservatives, food colorings, essences or emulsifiers were used during production. As some coloring matters to be used in food processing are synthetic compounds (such as chemical colorants extracted from coal tar), any consumers who happen to take in excessive amount will be susceptible to stomachache, diarrhoea and chronic food poisoning.

# 4) Production dates are sometimes falsified and put backward at will:

For all pre-packaged foods, the production date on the label should indicate the real date when the food is actually packaged and the label should also instruct consumers how long that product's storage period could be. Nevertheless, in order to fraudulently extend the shelf-life of their pre-packaged food products, some producers resort to deception by practicing fraud while marking dates of production. Regardless of the stipulation demonstrated by the law that temporary adhesive labels would not be allowed any longer after September 1, 1996, some producers are still trying illegal means to play trickery on consumers. They separate food labels from packaging boxes or bottles and print some adhesive labels marked with various dates, so that when their distributors or retailers come to buy, they can easily select the labels with proper dates and stick them to their products.

5) Some food producers try to claim or exaggerate the nutritional or curative effects of their products:

In particular, the Chinese authorities are concerned with food labeling and are strictly opposed to misleading and exaggerated labels meant especially for advertising effect. According to the Chinese food labeling law, the labels on both imported or domestic pre-packaged foods should not contain any contents which are meant to advertise medical, curative or nutritional effects.

However, in reality, some labels still claim that the products they cover contain nutrients and have a certain sort of curative effects or health-care function. As a matter of fact, almost 98% of them only contain a trace of the nutrient and what's more, they have not been proven by any public health authority through clinical experiments.

6) The existing problems with the labels on imported pre-packaged foods:

The Chinese food labeling law permits labels that are primarily in English and other foreign languages, but stipulates that the required contents be printed in simplified Chinese characters as well. As this requirement would probably cause foreign exporters of pre-packaged foods a lot of inconvenience and financial burden to adopt Chinese labeling, the Chinese government in 1995 began to allow the expedient use of temporary Chinese language stickers. The law stated that stickers were fine in its transitional period, but in the meantime it also notified the public that as of September 1, 1996, imported packaged foods without permanently-printed Chinese labels would be refused entry to China. However, imported packaged foods with modified compliance labels in Chinese inventories (already in China in a warehouse) were and are still allowed to be sold, even after September 1, 1996, the deadline.

At present, more and more imported food products are appearing in China's increasingly-integrated market, but many

GAIN Report #CH9010 Page 23 of 177

of the labels are still primarily printed in foreign languages. In fact, most Chinese consumers do not read languages other than their native tongue, so that when they go shopping for some imported foods, they can not tell the brand, production place, ingredients, and storage period of the product they intend to buy. To make matters worse, when the ignorant buyers come to consult the shop attendants, most of the shop assistants also do not know any of this. Under such circumstances, this provides a hotbed for misleading information, label imitation, deceptive illustrations and other trickeries."

**Note:** For the complete text of the General Standard for the Labeling of Foods (Gb7718-94), please see annex ANX II.1 below.

Additional standards which must be compiled with on labeled products include:

- ! GB 2760-96 Hygiene Standard For The Use of Food Additives
- ! GB 13432-92 Labeling of Foods for Special Nutrient

#### **B. LABELING OF CALORIES AND NUTRIENTS IN FOODS**

The applicable labeling procedures related to the calories and nutrients in all foodstuff is shown based on the calories contained in every 100g or 100ml of special nutrient foods and the calories contained in every portion of the recommended serving.

The calories are expressed in kJ; or in kJ (equivalent to xx kcal) and calculated as follows:

#### Calculation of the Calories

Carbohydrates	17 kJ/g or 17 kJ/g (equaling 4 kcal/g)
Protein	17 kJ/g or 17 kJ/g (equaling 4 kcal/g)
Fat	38 kJ/g or 38 kJ/g (equaling 9 kcal/g)
Alcohol	29 kJ/g or 29 kJ/g (equaling 7 kcal/g)
Organic acid	13 kJ/g or 13 kJ/g (equaling 3 kcal/g)

Nutrients declaration requires labeling the protein (g) contained in every 100g or 100ml special nutrient food and the corresponding protein content (g) in every portion of the recommended ration.

The protein content is calculated in the following formula:

Protein content = total nitrogen obtained from Kessler's nitrogen determination method x 6.25 where: 6.25----general conversion coefficient. If alternative conversion coefficient is stipulated in the food product standard or analysis, the conversion shall be conducted according to the prescribed coefficient.

#### Fat:

GAIN Report #CH9010 Page 24 of 177

Labeling the fat content (g) in every 100g or 100ml special nutrient food, and the corresponding fat content (g) in every portion of the recommended ration.

# **Carbohydrates:**

Labeling the carbohydrates content (g) in every 100g or 100 ml special nutrient food, and the corresponding carbohydrates content (g) in every portion of the recommended ration.

If it is needed to label the type of the carbohydrates, the labeling can be done in the following formula:

Every 100g or 100ml contains xxg carbohydrates, of which xxg xx saccharine

#### **Vitamins:**

Labeling the vitamin content (mg, ug or international unit) in the special nutrient food, and the corresponding vitamin content (ma, ug or international unit).

e.g.: vitamin B1, vitamin B2, vitamin C are expressed in mg or ug; whereas vitamin A, vitamin D are expressed in international units.

#### **Minerals and Trace Elements:**

Labeling the contents of minerals and trace elements (mg or ug) in every 10g or 100ml special nutrient food, and their corresponding contents (mg or ug) in every portion of the recommended ration.

# LABELING OF FOODS FOR SPECIAL NUTRIENT

This Standard applies to the labeling for the sale of packed infant and baby foods, enriched nutrient foods, adjusted nutrient foods (such as low-saccharose, low-sodium and low glutamic protein foods).

Special nutrient foods refer to the foods that contain modified natural nutrients and their relative proportions to cater to the nutritional needs of certain special human groups.

#### **Nutrients:**

Refer to the substances that make up the compositions of foods used to maintain the normal metabolism of human body. Normally these nutrients fall into 5 main categories: protein, fat, carbohydrates, minerals and vitamins.

# **Basic Principle**

The labeling of special nutrients foods shall conform to the following principles in addition to compliance with the provisions in Chapter IV of GB 7718 - General Standard for food labeling.

It is imperative to mark clearly the calorific value and nutrient contents that the product is secured to have within the

GAIN Report #CH9010 Page 25 of 177

span of shelf life.

The following descriptions should not be employed in the labeling:

Having "preventive" or "curing" effects to a certain disease.

"Having rejuvenation effect", "prolonging the life expectancy", "turning white hair into black", "stimulating new dental growth", "combating and curing cancer" or other similar usages.

"Secret ancestral prescription", "tonic foods", "health and fitness food", "royal court food" or other similar usages.

Attach names of medicines before and after the name of food, or employ illustrations and names of medicines to imply the curing, health-enhancing or other similar effects contained therein.

# BASIC CONTENTS OF THE LABELING

#### Name of foods

Mark the name of food per stipulations contained in Article 5.1 of GB 7718, General Standard for Food Labeling.

With regard to foods that conform to the stipulations contained in Article 3.1, potential target consumers envisaged for that particular food must be marked in the name of foods.

# **Ingredients**

If one or several kinds of raw materials or ingredients are highlighted, their respective percentages (qualitative or volumetric percentages) should be marked.

#### **Calories**

Mark the calorific values of the particular special nutrient food per Annex A (supplement).

# **Nutrients**

Mark clearly the contents of protein, fat, carbohydrates, vitamins, minerals and trace elements in the particular special nutrient food per Annex A (supplement).

#### **Batch number**

Mark the production (sub-packaging) batch number according to stipulations contained in Article 7.1 of GB 7718.

# Date mark and storage instructions

Mark the production date, shelf life, storage date and instructions per stipulations contained GB 7718, and should mark

GAIN Report #CH9010 Page 26 of 177

the following contents when necessary:

Nutritional value and/or sensory quality of the special nutrient foods depend upon particular storage conditions after the food pack is opened, it is imperative to mark the appropriate storage condition in the label.

If the special nutrient food cannot be stored in its original package container after the seal is opened, it is imperative to remind the consumers of the awareness.

#### Product standard code

It is imperative to mark the codes and/or serial numbers of the State standard, industrial standard or enterprise standard that the products should be governed accordingly.

Exemption: When the maximum surface area of a container is smaller than 10 sq cm, requirements contained in Articles 5.2, 5.7 and from 5.9 to 5.11 may be exempted.

**Note:** For the complete text of Labeling of Foods for Special Nutrient (GB 13432-92), please see annex ANX II.2 below.

# C. REGULATIONS FOR THE INVESTIGATION AND PUNISHMENT OF FOOD LABELING VIOLATIONS

These Regulations were promulgated by the State Bureau for Technical Supervision on June 20, 1995 and went into effect on October 1, 1995. They were formulated to encourage adherence to the PRC's various pieces of food labeling legislation including the General Labeling Standards for Foodstuffs, the Labeling Standards for Alcoholic Beverages, and the Labeling Standards for Special Nutritional Foodstuffs and set out penalties for violations of food product labeling regulations.

If a foodstuff label does not indicate the product's quality grading, product standard number, or the term "irradiated foodstuff" for foods having undergone some form of ionization treatment or the labeling does not conform with the basic principles or the basic requirements of the General Labeling Standards for Foodstuffs a rectification order will be issued. Failure to make the necessary concretions within the specified the limit will result in an order for the suspension of production an sales and may be accompanied with fines of between RMB500-1000 or 10% of the value of the foodstuff.

In instances where the foodstuff label does not indicate the product name, net content, solid matter content, the producer or packager's name and address, the production or packaging date, the list of ingredients, or the "best before" or "use by" dates; for special nutritional foodstuffs, the above plus the caloric value, the nutrients, or the method of eating; for alcoholic beverages, the items for general foodstuff labels above, minus solid matter content, plus alcohol percentage, juice content, product type, or sugar content; for prepackaged imported food products, the items for general foodstuff labels above in Chinese plus the country or region (Taiwan, Macau, or Hong Kong) a rectification order will be issued possibly accompanied by circulation of a notice of criticism. Failure to make the required corrections within the specified time limit will result in an order to suspend production and sales and may be accompanied by a fine of between RMB1000-3000 or 15% of the value of the foodstuff.

GAIN Report #CH9010 Page 27 of 177

Where pre-packaged food products do not carry a label or where they do not carry a label written in Chinese an order for the suspension of production and sales will be issued an the products and any illegal earnings will be confiscated. Fines of between RMB3000-5000 or 15%-20% of the value of the foodstuff may also be imposed.

In cases where labels are counterfeited or illegally used, the production, "best before", or "use by" dates are fraudulently written or changed, or foodstuff labels are used for deception an order will be issued suspending production and sales and the product and any illegal earnings will be confiscated. A fine of RMB5000 or between one and three times the value of the product may also be imposed. Serous cases will be turned over to the judicial authorities and prosecuted.

For perishable pre-packaged food products being sold after the expiration of their "use by" date the authorities will order a stoppage of sales confiscated the product and any illegal earnings, and impose a fine of RMB5000 or of between one and five times the value of the product. Serious cases will be turned over to the judicial authorities for prosecution.

Where a pre-packaged food product has exceeded its "best before" date, sales must be halted and the product sent to an officially recognized quality inspection institution for testing. Provided that the expiry date details are clearly indicated the sale of goods passing inspection may be resumed, however, if sales are resumed without clearly indicating the expiry dated the administrative sanctions detailed in paragraph 2 above will be imposed. Continued sale of products having failed inspection of refusal to produce the inspection report of the quality inspection institution will result in the imposition of administrative sanctions similar to those detailed in the paragraph immediately above.

Where the label of a prepackaged foodstuff does not indicate the production, "best before", or "use by" date a quality inspection institution inspection report must be produced. If the food product meets quality standards on ly the administrative sanctions detailed in paragraph 3 above will be imposed, however, if the product fails inspection or there is recusal to produce the quality inspection institution inspection report administrative sanctions as detailed in paragraph 6 above will be imposed.

Any violations of mandatory state standards for food product labeling will be handled in accordance to these Regulations by the administrative authorities for technical supervision of the people's governments at the county level and above. Uniform supervision and control over the investigation and punishment of food labeling violations is the province of the State Bureau of Technical Supervision.

GAIN Report #CH9010 Page 28 of 177

# D. REGULATIONS FOR ADMINISTRATION OF THE INSPECTION OF FOOD LABELS ATTACHED TO IMPORT AND EXPORT FOODS

Regulations for Administration of the Inspection of Food Labels Attached to Import and Export Foods were issued by the State Administration for Import and Export Commodities Inspection ('SAIECI') with Document [1994] Guo Jian Jian No. 112 on April 21, 1994. The Regulations were implemented from June 1, 1994 for the inspection of labels on foodstuffs for export to the United States and from August 1, 1994 for the inspection of labels on all import and export foodstuffs.

# **General Principles:**

The Regulations were formulated in accordance with the Law of the People's Republic of China on Inspection of Import and Export Commodities (1994). The Regulations aim to establish a system of inspection and registration for labels attached to all imported and exported food products listed in the Classification Table for Import and Export Commodities to be Inspected by Commodity Inspection Organizations, and other food products as specified in foreign trade contracts and relevant laws and regulations.

# **Registration:**

All labels appearing on food which will be imported or exported must be registered. Registration is carried out with the registration and advisory office of SAIECI dealing with food labels for imported and exported goods. Applicants are required to submit separate applications for the registration of different types of labels and provide all necessary technical information together with sample products and food labels. Upon approval of an application, a registration certificate will be issued.

# **Inspection:**

Both the labels and the quality of imported and exported foods are inspected by SAIECI at the same time. When import and export foods are submitted for inspection, the registration certificate of the food label must be provided. While import food labels must be inspected according to state standards and foreign trade contracts, inspection of foreign food labels must comply with the relevant standards of the destination country, foreign trade contracts or other PRC regulations. No labels that have failed the inspection may be used.

#### **Penalties:**

Penalties for violation of the Regulations will be determined in accordance with the Law of the People's Republic of China on Inspection of Import and Export Commodities and its detailed implementing rules (1992).

# ANX II.1 THE GENERAL STANDARD FOR THE LABELING OF FOODS (GB7718-94)

UDC 664.004.24 X 04
STATE STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA GB7718-94
Promulgated on February 4, 1994 Implemented since February 1, 1995
Promulgated by the China State Bureau of Technical Supervision

#### 1. MAIN CONTENTS AND APPLICABILITY

This Standard has stipulated the basic principles, marking contents and requirements in connection with the labeling of

GAIN Report #CH9010 Page 29 of 177

foods.

This standard applies to labels on the pre-packed foods for domestic sale.

# 2. REFERENCE STANDARDS

GB 2760 Hygiene Standard For the Use of Food Additives (Note: See Section III of this report)

GB 13432 Labeling of Foods for Special Nutrient (Note: See Section II.E of this report)

# 3. TERMINOLOGY

#### 3.1 Labels of Foods

Characters, graphs, signs and all descriptive materials on the containers of the pre-packed foods.

# 3.2 Pre-packed Foods

Foods pre-packed in containers to be delivered to consumers.

# 3.3 Container

Any forms of packaging that pack foods completely or partially to be made in deliverable units, also including the wrapping paper.

# 3.4 Food Additives

Synthetic Chemicals or natural materials added to foods to enhance the food quality as well as color, smell and taste, and to meet the needs of antiseptic and processing requirements.

# 3.5 Ingredients

Any materials including water and food additives which are used in manufacturing or processing the foods and eventually exist (including existing in a modified form) in the final products.

# 3.6 Quality Guaranteed Period (The Optimal Service Period)

The period in which the food quality can be maintained subject to conditions as stipulated in the label. Within the period the foods are completely suitable for sale in conformity with the quality standard as provided in the label or product standard; however, the foods are still edible within a given length of time beyond this period.

# 3.7 Storage Period (Recommended Deadline of Serving Period)

Refers to the deadline until which the foods remain edible subject to the conditions provided in the label; exceeding the

GAIN Report #CH9010 Page 30 of 177

limit, the product quality may deteriorate and therefore not be suitable for sale.

#### 3.8 Solids

The solid part of the foods that are composed of both solids and liquids, not including the soluble solids.

# 4. BASIC PRINCIPLES

- 4.1 All contents of the food labels shall not describe or introduce foods in an erroneous, misleading or deceptive manner.
- 4.2 All contents of the food labels shall not use such wording, graphics and signs directly or implicitly to cause the consumers to confuse one kind of food or certain features of it with another kind of food.
- 4.3 All contents of the food labels must comply with the laws and regulations of the State and shall conform with the provisions of the corresponding product standard.
- 4.4 All contents of the food labels must be easy to understand, accurate and scientific.

# 5. REQUIRED MARKING CONTENTS

- 5.1 Name of the Food
- 5.1.1 A particular name must be adopted to indicate the true nature of the food.
- 5.1.1.1 Whereas one or several names have been designated to a certain kind of food in the State Standard or Trade Standard, one of the names shall be selected.
- 5.1.1.2 Where the above mentioned designated names do not exist, a common name or popular name that does not mislead or confuse the consumers shall be adopted.
- 5.1.2 Where the "innovative name", "fancy name", "brand name" or "trademark name" are used, any one name as stipulated in Article 5.1.1 must be used at the same time.
- 5.2 Ingredient Table
- 5.2.1 Except for single ingredient foods, food labels must have a clearly marked ingredient table.
- 5.2.1.1 The title of the ingredient table is "Ingredients" or "Ingredient Table".
- 5.2.1.2 Various ingredients must be arranged in a retrogressive order according to the amount of use.
- 5.2.1.3 In case that a certain ingredient is itself a mix of ingredients which is composed of two or more kinds of other ingredients, the name of the ingredient mix must be indicated in the Ingredient Table, then to be followed with

GAIN Report #CH9010 Page 31 of 177

a parenthesized information of original ingredients enumerated in a decreasing sequence according to the amount used. When the ingredient mix has a designated name in the State Standard or Trade Standard and the amount of its use is below 25% of the total amount of the food, it is not necessary to mark the original ingredients, but the food additives contained therein must be marked.

- 5.2.2\* Various ingredients must use specific names per stipulations contained in Article 5.1. Food additives must use the product names or variety names as provided in GB 2760.
- \*Note: Article 5.2.2 will be amended effective January 1, 2000. The new version of Article 5.2.2 is found in Section II.B.5 of this report.
- 5.2.3 When the raw materials used in the course of processing have been changed into other compositions (referring to the fermented products, such as liquor, soy sauce, vinegar, etc.), in order to indicate the true nature of the product, it is suggested to use the marking of "raw material" or "raw material and ingredients", instead of "ingredients" according to the marking as provided in Article 5.2.1.2.
- 5.3 Net Contents And Contents of Solids
- 5.3.1 The net contents of the foods in containers must be marked in the following manner:
  - a. For liquid foods, in terms of volume;
  - b. For solid foods, in terms of weight;
  - c. For semi-solid foods, in terms of weight or volume.
- 5.3.2 When the container has such foods composed of both solid and liquid materials, in addition to marking of the net contents, the solids contents of that food must be marked in terms of weight or percentage.
- 5.3.3 If in the same container several separate foods of same quality and similar shape are packed together, in addition to marking the net contents, the quantities of the foods must also be marked.
- Name and Address of the Manufacturer and Distributor

The name and address of any unit, duly registered according to law, that is responsible for the food manufacturing, packaging, re-packaging or distributing must be marked. Imported foods must have clear markings that indicate the country of origin and the name and address of the general distributor duly registered in the country according to law.

- 5.5 Date Mark and Storage Directions
- 5.5.1 Production date, quality guarantee period and/or storage period of the foods must be marked.
- 5.5.1.1 The date should be marked in a sequence of Year, Month and Date.
- 5.5.1.2 The quality guarantee period or storage period should be marked in one of the following ways:

GAIN Report #CH9010 Page 32 of 177

a. "It is recommended to be consumed before..." Or "It is recommended to drink before..." (in marking the quality guarantee period);

- b. "Quality guaranteed until..."; "Storage period until...";
- c. "Quality guarantee period is...months"; "Storage period is ...months".
- 5.5.2 Should the quality guarantee period or storage period of the foods have anything to do with conditions of storage, the storing method must be specified.
- 5.6 Quality Rating

Quality rating must be marked clearly for foods whose quality rating has been explicitly defined in the product standard (State Standard, Trade Standard).

# 5.7 Product Standard Coding

The codes and serial numbers specifying the products in the corresponding State Standard, Trade Standard or Enterprise Standard must be marked.

- 5.8 Special Marking Content
- 5.8.1 With regard to foods processed with ionized radioactive rays or ionized energy, reference must be made near the food name marking "food processed in radioactivity".
- 5.8.2 With regard to any ingredients subject to ionized radioactivity or ionized energy processing, a description must be made in the Ingredient Table.
- 6. EXEMPTION OF MARKING
- When the maximum surface area of the container is smaller than 10 cm2, except for the spices and food additives used, contents specified in Articles 5.2 and 5.5-5.7 can be exempted.
- For foods whose quality guarantee period or storage period have been stipulated in the product standard (State Standard, Trade Standard) as being above 18 months, the reference of quality guarantee period or storage period can be exempted.
- 6.3 Imported foods can be exempted of the name, address and product standard number of the original manufacturer.
- 7. RECOMMENDED MARKING CONTENTS
- 7.1 Batch Number

GAIN Report #CH9010 Page 33 of 177

The production or re-packaging units can resort to their own methods to mark the production (repackaging) batch number of the foods.

# 7.2 Serving Method

To ensure the correct way of serving the foods, the labels can have such helpful descriptions marking the container opening and serving method, recommended daily intake, recooking method, etc. Separate descriptions can be added aside from the labels when necessary.

#### 7.3 Calories and Nutrients

Contents of calories and nutrients can be marked per stipulations of GB 13432.

# 8. BASIC REQUIREMENTS

- 8.1 Food labels cannot be separated from the packaging containers.
- 8.2 All contents of the food labels should not be blurred or even detached during circulation; they must be guaranteed to remain conspicuous, easily identifiable and readable when the consumers purchase and eat them.
- 8.3 All contents of the food labels must be clear, simple and conspicuous. Words, signs and graphics should be intuitive and understandable, contract shades should be adopted to portray background and base colors
- 8.4 Food name must be printed at the eye-catching position of the labels. Food name and the net content should be printed within the same field of view.
- 8.5 Languages used in the food labels must be standard Chinese.
- 8.5.1 Chinese Pinyin (Latinized phonetic transcriptions) can be used at the same time, however, the spelling must be correct, and should not be in bigger letters than the corresponding Chinese characters.
- 8.5.2 Ethnic or foreign languages can be used at the same time, but they must maintain close correlations with the Chinese characters, foreign languages should not be in bigger letters than the corresponding Chinese characters.
- 8.6 The measurement units used in the food labels must be subject to the State legal measurement units, such as:

Weight units: g or gram, kg or kilogram
Volume units: mL, ml or milliliter, L or Liter

ADDITIONAL NOTES: This standard is proposed by the National Committee For the Standardization Technology of the Food Industry. This standard is drafted by the Drafting Working Group organized by the National Committee for the Standardization Technology of the Food Industry.

GAIN Report #CH9010 Page 34 of 177

This standard has referred to and adopted the (CAC) CODEX STAN 1 - 1991 "The General Standards For the Labeling of Pre-packed Foods" promulgated by FAO/WHO Food Law Committee.

GAIN Report #CH9010 Page 35 of 177

# ANX II.2 LABELING OF FOODS FOR SPECIAL NUTRIENT (GB 13432-92)

#### MAIN THEME AND SCOPE OF APPLICATION

This Standard has stipulated the basic principle and contents pertaining to the labeling of foods for special nutrients.

This Standard applies to the labeling for the sales of packed infant and baby foods, enriched nutrient foods, adjusted nutrient foods (such as low-saccharose, low-sodium and low glutamic protein foods).

#### 2. STANDARD APPLIED

GB 7718 General Standard for Food Labeling

#### 3. TERMINOLOGY

# 3.1 Special nutrient foods

Refer to the foods that contain modified natural nutrients and their relative proportions to cater to the nutritional needs of certain special human groups.

#### 3.2 Nutrients

Refer to the substances that make up the compositions of foods used to maintain the normal metabolism of human body. Normally these nutrients fall into 5 main categories: protein, fat, carbohydrates, minerals and vitamins.

# 3.3 Other terminology

Same as Article 3.1 to Article 3.8 in GB 7718.

# 4. BASIC PRINCIPLE

The labeling of special nutrients foods shall conform to the following principles in addition to compliance with the provisions in Chapter IV of GB 7718:

- 4.1 It is imperative to mark clearly the calorific value and nutrient contents that the product is secured to have within the span of shelf life.
- 4.2 The following descriptions should not be employed in the labeling:
- 4.2.1 Having "preventive" or "curing" effects to a certain disease.
- 4.2.2 "having rejuvenation effect", "prolonging the life expectancy", "turning white hair into black", "stimulating new dental growth", "combating and curing cancer" or other similar usages.

GAIN Report #CH9010 Page 36 of 177

4.2.3 "Secret ancestral prescription", "tonic foods", "health and fitness food", royal court food" or other similar usages.

- 4.2.4 Attach names of medicines before and after the name of food, or employ illustrations and names of medicines to imply the curing, health-enhancing or other similar effects contained therein.
- 5. BASIC CONTENTS OF THE LABELING
- 5.1 Name of foods
- 5.1.1 Mark the name of food per stipulations contained in Article 5.1 of GB 7718.
- 5.1.2 With regard to foods that conform to the stipulations contained in Article 3.1, potential target consumers envisaged for that particular food must be marked in the name of foods.
- 5.2 Ingredients
- 5.2.1 Mark clearly the ingredients table per stipulations contained in Article 5.2 of GB 7718.
- 5.2.2 If one or several kinds of raw materials or ingredients are highlighted, their respective percentages (qualitative or volumetric percentages) should be marked.
- 5.3 Calories

Mark the calorific values of the particular special nutrient food per Annex A (supplement).

5.4 Nutrients

Mark clearly the contents of protein, fat, carbohydrates, vitamins, minerals and trace elements in the particular special nutrient food per Annex A (supplement).

5.5 Net content and contents of solids

Mark clearly the net contents and the contents of solids per stipulations contained in Article 5.3 of GB 7718.

5.6 Name an address of manufacturer and distributor

Mark the name, address and telephone number per stipulations contained in Article 5.4 of GB 7718.

5.7 Batch number

Mark the production (sub-packaging) batch number according to stipulations contained in Article 7.1 of GB 7718.

5.8 Date mark and storage instructions

GAIN Report #CH9010 Page 37 of 177

Mark the production date, shelf life, storage date and instructions per stipulations contained in Article 5.5 of GB 7718, and should mark the following contents when necessary:

- 5.8.1 Should the nutritional value and/or sensory quality of the special Nuprin foods depend upon particular storage conditions after the food pack is opened, it is imperative to mark the appropriate storage condition in the label.
- 5.8.2 If the special nutrient food cannot be stored in its original package container after the seal is opened, it is imperative to remind the consumers of the awareness.
- 5.9 Serving method

Mark the label according to the stipulations contained in Article 7.2 of GB 7718.

5.10 Quality grades

Mark the quality grades according to the stipulations contained in Article 5.6 of GB 7718.

5.11 Product standard code

It is imperative to mark the codes and/or serial numbers of the state standard, industrial standard or enterprise standard that the products should be governed accordingly.

# 6. BASIC REQUIREMENT

It is required to comply with the stipulations contained in Chapter VIII of GB 7718.

Note: When the maximum surface area of a container is smaller than 5.9 to 5.11 may be exempted.

ANNEX A: LABELING OF CALORIES AND NUTRIENTS IN FOODS (SUPPLEMENT)

This Annex is applicable to the labeling procedures related to the calories and nutrients in all foodstuffs.

- A1 Calories
- A1.1 Labeling the calories contained in every 100g or 100ml of special nutrient foods and the calories contained in every portion of the recommended serving.
- A1.2 The calories are expressed in kJ; or in kJ (equivalent to xx kcal).
- A1.3 Calculation of the Calories

Carbohydrates 17 kJ/g or 17 kJ/g (equaling 4 kcal/g)

Protein 17 kJ/g or 17 kJ/g (equaling 4 kcal/g)

GAIN Report #CH9010 Page 38 of 177

Fat 38 kJ/g or 38 kJ/g (equaling 9 kcal/g)
Alcohol 29 kJ/g or 29 kJ/g (equaling 7 kcal/g)
Organic acid 13 kJ/g or 13 kJ/g (equaling 3 kcal/g)

## A2 Nutrients

- A2.1.1 Labeling the protein (g) contained in every 100g or 100ml special nutrient food and the corresponding protein content (g) in every portion of the recommended ration.
- A2.1.2 The protein content is calculated in the following formula:

<Protein content> = <total nitrogen obtained from Kessler's nitrogen determination method> x 6.25

Note: 6.25 is the general conversion coefficient. If alternative conversion coefficient is stipulated in the food product standard or analysis, the conversion shall be conducted according to the prescribed coefficient.

#### A2.2 Fat

Labeling the fat content (g) in every 100g or 199ml special nutrient food, and the corresponding fat content (g) in every portion of the recommended ration.

- A2.3 Carbohydrates
- A2.3.1 Labeling the carbohydrates content (g) in every 100g or 100ml special nutrient food, and the corresponding carbohydrates content (g) in every portion of the recommended ration.
- A2.3.2 if it is needed to label the type of the carbohydrates, the labeling can be done in the following formula:

Every 100g or 100ml contains xxg carbohydrates, of which xxg xx saccharine

#### A2.4 Vitamins

Labeling the vitamin content (mg, ug or international unit) in the special nutrient food, and the corresponding vitamin content (mg, ug or international unit).

Example: Vitamin B1, Vitamin B2, Vitamin C are expressed in mg or ug; whereas Vitamin A, Vitamin D are expressed in international units.

# A2.5 Minerals and Trace Elements

Labeling the content of minerals and trace elements (mg or ug) in every 100g or 100ml special nutrient food, and their corresponding contents (mg or ug) in every portion of the recommended ration.

#### ADDITIONAL NOTES:

GAIN Report #CH9010 Page 39 of 177

This Standard is proposed by China National Food Industry Standardization Technology Committee.

This Standard is drafted by the drafting group composed jointly by the Ministry of Light Industry, Ministry of Commerce, Ministry of Agriculture, State Commodity Inspection Bureau, Ministry of Public Health and China Standardization and Information Classification and Coding Institute.

The main writers of this Standard include: Du Peng, Li Zhiqiang, Pei Shan, Xu Liu, Wang Zheng, Liu Qui, Hao Yu, Li Hongbing, Zhang Huaying.

This Standard has referred to or adopted the FAO/WHO Commission d' Alimentation et Coordination (CAC) CODEX STAN 146-1985 "Standard For the Labeling and Noting of Prepackaged Special Purpose Foods".

GAIN Report #CH9010 Page 40 of 177

## III. FOOD ADDITIVES REGULATIONS

#### A. SUMMARY AND COMMENTS ON GB 2760-1996

In China, there are 21 categories of food additives according to their different functions. They are acidity regulator, anti-caking, defoaming agent, antioxidant, bleaching agent, raising agent, chewing gum base, colorant, color fixative, emulsifying agent, enzyme preparation, flavoring potentiator, flour improving agent, film former, moisture stabilizer, nutrition potentiator, antiseptic substance, thickening agent and other agents.

This standard supersedes GB 2760-86 "Hygienic Standards for Uses of Food Additives" and GB- 2760-86 "Hygienic Standards for Uses of Food Additives (categories supplemented in 1988, 1989 and 1990)".

In time of the revision of GB 2760-93, the categories of the food additives have employed the classification, numbering, and coding of GB-12493-90 "The Classification and Numbering of Food Additives" and GB- 14156-93 "The Classification and Coding of Flavoring Substances", and included the numbering of American Flavor and Extract Manufacturers' Association (FEMA), which are arranged in alphabetical order.

The names of many foods were not unified in the original standard, hence revisions have been made according to the related standards and technical terms.

This standard was published for the first time in 1977, and was revised for the third time in December 1996.

As of the date of implementation, this standard supersedes GB 2760-86.

The annex A, annex B and annex C in this standard are all normal annexes.

The annex D in this standard is the informative annex.

Technical Commission of Standardization of Food Additives proposed this standard.

Institute of Food Hygiene Control and Inspection under the Ministry of Public Health drafted this standard.

This standard was mainly drafted by Gao Hejuan, Chen Yaojun, Zheng Pengran, Dai Ying, Yuan Yicheng, Zhou Shunan and Dai Yin.

The Institute of Food Hygiene Control and Inspection, which is entrusted by the Ministry of Public Health, is responsible for the interpretation of this standard.

**Note:** For the complete text of Hygienic Standards for Uses of Food Additives (GB 2760-1996), please see annex ANX III.1 below.

GAIN Report #CH9010 Page 41 of 177

# ANX III.1 HYGIENIC STANDARDS FOR USES OF FOOD ADDITIVES (GB 2760-1996)

ICS 67.220.20

GB

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 2760-1996

Supersedes GB 2760-86

Published on December 29, 1996

Implemented on February 1, 1997

Published by the Ministry of Public Health

#### **Field**

This Standard specifies the variety of food additives, the field of application and the maximum dose level. This Standard is applicable to all producers and dealers involved in use of food additives.

## Reference

The clauses included in the following Standards, through reference in this standard, constitute when This standard was published, the Editions referred to were all part of this Standard. All Standards are subject to revision and all parties that apply the Standards should study the possibility of the application of the latest editions of the following Standards.

GB 12493-90 The classification and numbering of food additives.

GB 14156-93 Classification and code of flavoring substances.

GB 14880-94 Hygienic Standard for use of nutritional fortification substances in foods.

# The Variety of Food Additives, The Field of Application, The Maximum Dose Level

The variety of food additives, the field of application, the maximum dose level should confirm to the regulations in the following table:

Category	Name of Food	Scope of Application	Maximum Dose	Note
	Additive		g/kg	
Acidity	Citric Acid	All foods	Appropriate dose	
Regulator	(01.101)		level as required in	
			production	
	Lactic Acid	All foods	Appropriate dose	
	(01.102)		level as required in	
			production	
	Tartaric Acid	All foods	Appropriate dose	
	(01.103)		level as required in	
			production	

GAIN Report #CH9010 Page 42 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose	Note
A -: 1:4	_	A 11 C 1-	g/kg	
Acidity	Malic Acid	All foods	Appropriate dose	
Regulator	(01.104)		level as required in	
	M . T		production	
	Meta Tartaric Acid	Canned grapes	Appropriate dose	
	(01.105)		level as required in	
	71 1 1 1 1		production	
	Phosphoric Acid	Compound condiments, canned	Appropriate dose	Compound condiment is
	(01.106)	foods, cola type drinks, cheese,	level as required in	
		fruit jelly	production	condiment composed of
	Acetic Acid	Compound condiments, canned	Appropriate dose	two or more kinds of
	(01.107)	foods, cola type drinks, cheese,	level as required in	condiments
		fruit jelly	production	
	Hydrochloric Acid	Processing aids	Appropriate dose	
	(01.108)		level as required in	
			production	
	Hexandioic Acid	Solid beverage bases	0.01	
	(01.109)	Fruit jelly powder	0.15	
	Fumaric Acid	Carbonated drinks	0.3	
	(01.110)	Fruit juice drinks, wet dough	0.6	
		preparations		
	Sodium Hydroxide	Processing aids	Appropriate dose	
	(01.201)		level as required in	
			production	
	Potassium Carbonate	Flour preparations	Appropriate dose	
	(01.301)		level as required in	
			production	
	Sodium Carbonate	Flour preparations,	Appropriate dose	
	(01.302)	pastry	level as required in	
	, ,		production	
	Sodium Citrate	All foods	Appropriate dose	1
	(01.303)		level as required in	
	,		production	
	Potassium Citrate	All foods	Appropriate dose	1
	(01.304)		level as required in	
	,		production	
	Sodium	Biscuits, pastry,	Appropriate dose	1
	Sesquicarbonate	goat milk, dairy products	level as required in	
	(01.305)	Some many, sum y products	production	
	Monobasic Sodium	All foods	Appropriate dose	1
	Citrate	2 11 10000	level as required in	
	(01.306)		production	
	(01.300)		production	1

GAIN Report #CH9010 Page 43 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Anti-caking Agent	Potassium Ferrocyanide (02.001)	Salt	0.01	Measure amount of Ferrocyanide radical
	Sodium Aluminosilicate (02.002)	Vegetable fat powder	5.0	
	Tricalcium Phosphate	Wheat flour,	0.03 (in flour)	1
	(02.003)	Solid beverage bases	8.0	
	Silicon Dioxide (02.004)	Egg powder, milk powder, cocoa powder, cocoa oil, vegetable fat powder, instant coffee, concentrated soup	15	
		powder		
		Powdered flavoring essence	80	
	Microcrystalline Celluloses	Vegetable fat powder, skim milk cream	20.0	
	(02.005)	Ice cream	40.0	1
	( )	High cellulose food, bread	50.0	1
Anti-foaming Agent	Emulsifying Silicon Oil (03.001)	-	0.2	
	DSA-5	Brewing	1.0	
	(03.002)	Bean products processing	1.6	
	,	Sugar refining, fermentation	3.0	]
	PPE (03.003)	Fermentation	Appropriate dose level as required in	
	BAPE		production	
	(03.004)			
	Polyoxypropylene			
	Glyceride			
	(03.005)			
	Polyoxypropylene Glycerolether (03.006)			

GAIN Report #CH9010 Page 44 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Antioxidant	Butylated Hydroxyl Anise (BHA) (04.001) Butylated Hydroxyl (BHT)	Edible oils, fried foods, dried fish products, biscuits, instant noodles, instant rice, canned nuts, salted/cured meats	0.2	Total quantity of mixed antioxidant BHA and BHT used should not exceed 0.2 g/kg; Total quantity of mixed antioxidant BHA, BHT
	(04.002) Propyl Gallate (PG)		0.1	and PG used should not exceed 0.11 g/kg; The maximum
	(04.003)		0.1	dose level of PG should not exceed 0.05 g/kg (measure amount of fat)
	Sodium D-Iso	Beer	0.04	Measure amount of
	Ascorbate (04.004)	Grape wine, fruit and vegetable juice drinks	0.15	Ascorbic Acid
		Meat products	0.50	
		Canned fruits and vegetables, canned meats, fruit jam, frozen fish	1.0	
	Tea Polyphenol	Sauces containing grease	0.1	Measure amount of
	(04.005)	Fried foods, instant noodles	0.2	catechin in grease
	,	Meat products, fish products	0.3	<b>1</b>
		Fats, ham, pastry and pastry fillings	0.4	
	Phytic Acid (Inosital Hexaphosphoric Acid) Sodium Phytate	Preserving shrimp/prawns fresh	Appropriate dose level as required in production	Residual level: 20 mg/kg
		Edible oils, fruit and vegetable products, fruit and vegetable juice drinks, meat products	0.2	
	TBHQ	Edible oils, fried foods, dried	0.2	
	(04.007)	fish products, biscuits, instant noodles, instant rice, canned dried fruit, salted/cured meats		

GAIN Report #CH9010 Page 45 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Antioxidant	Licorice Antioxidant	Edible oils, fried foods, salted	0.2	
	(04.008)	fish, meat products, biscuits,	(measure amount	
	,	1	of licorice acid)	
		grease	,	
	Calcium Ascorbate	Crisp pastry, instant noodles	0.2	1
	(04.009)	Soup bases, meat products	1.0	
			(measure amount	
			of Ascorbic Acid	
			in grease)	
	Phosphatide	Candy, pastry, hydrogenated	Appropriate dose	
	(04.010)	vegetable oil	level as required	
			in production	
	Ascorbic Acid	Foods containing grease, instant	0.2	
	Palmitate	noodles, edible oils,		
	(04.011)	hydrogenated vegetable oil		
		Infant formula foods	0.01	
			(measure amount	
			of Ascorbic Acid	
			in fats)	
	Dilary	Edible oils, for keeping fruits and	0.2	
	Thiodipropionate	vegetables fresh, foods		
	(04.012)	containing grease		
	4-Hexyl Resorcinol	Prevent shrimps from browning	Appropriate dose	Residue level:
	(04.013)		level as required	#1 mg/kg
			in production	
	Ascorbic Acid	Beer	0.04	
	(Vitamin C) (04.014)	Fermented flour products	0.2	1

GAIN Report #CH9010 Page 46 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Bleaching Agent	Sulphur Dioxide (05.001)	Grape wine, fruit wine	0.25	Residue level of Sulfur Dioxide should not exceed 0.05 g/kg
	Potassium Metabisulphite	Beer	0.01	Residue level of Sulfur Dioxide for
	(05.002)	Candied fruit, biscuits, glucose, sugar, crystal sugar, maltose, candy, liquid glucose, bamboo	0.45	bamboo shoots, mushrooms and canned mushrooms should not
	Sodium Metabisulphite (05.003)	shoots, mushrooms and canned mushrooms		exceed 0.05g/kg; For biscuits, sugar, beans starch vermicelli and other foods it should
	Sodium Sulfite (05.004)	Glucose, sugar, crystal sugar, maltose, candy, liquid glucose, bamboo shoots, mushrooms and canned mushrooms, grapes, black currant concentrated juice	0.60	not exceed 0.1g/kg; For liquid glucose it should not exceed 0.2g/kg. For candied fruit, grapes, black currant
		Candied fruit	2.0	concentrate juices the residue level is # 0.05
	Sodium Hydrosulphite (05.005)	Candied fruit, dried fruit, dried vegetable, bean starch vermicelli, glucose, sugar, crystal	0.40	Residue level of yam starches # 0.03 g/kg
	Sodium Bisulphite (05.006)	sugar, maltose, candy, liquid glucose, bamboo shoots, mushrooms and canned mushrooms	0.45	
	Sulfur	Yam starch  Candied fruit, dried	0.20 Limited to	
	(05.007)	fruit, dried vegetable, bean starch vermicelli, sugar	fumigation	
Raising Agent	Sodium (Potassium) Bicarbonate (06.001) Ammonium Bicarbonate (06.002) Light-Weight Calcium Carbonate	All foods containing added raising agent	Appropriate dose level as required in production	For milk and dairy products, related regulations apply
	(06.003)	Flour enhancing agent	0.03 (in flour)	

GAIN Report #CH9010 Page 47 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose	Note
Raising Agent	Aluminium Potassium Sulfate (06.004) Aluminium Ammonium Sulfate	Fried foods, aquatic products, bean products, yeast powder, waffle biscuits, extrusion food, shrimp crackers	Appropriate dose level as required in production	Residue level of Aluminum: #100 mg/kg (dried sample, measure Al)
	(06.005) Calcium Hydrogen Phosphate (06.006)	Biscuits, infant formula food Fermented flour products	1.0 Appropriate dose level as required	
	Potassium Hydrotartrate (06.007)	Yeast powder	in production 250	-
Chewing Gum Base	Polyvinyl Acetate (07.001) Butadiene Styrene	Gum candy, emulsifying flavoring Gum candy	60.0 Appropriate dose	
	Rubber (07.002)	Outil Calldy	level as required in production	
Coloring	Amaranth Amaranth Alum Lake (08.001) Ponceau 4R Ponceau 4R Alum	Fruit juice (flavored) drinks, carbonated drinks, blended wines, candy, pastry decoration, green plum, haw products, pickles	0.05	When the same category of colors are mixed, the quantity shall not exceed the allowances of the single color. The
	Lake (08.002)	Red and green fruit shreds, canned dyed cherries (for decoration) Soy milk drinks	0.10	quantity of colors added in the solid drink and the high sugar fruit juices drink or the fruit taste
		Red sausage casings	0.025	drink should be based on the diluted multiples of its drinks.
		Shrimp (flavored) crackers  Candy coating	0.05 0.10	
		Ice cream	0.025	-

GAIN Report #CH9010 Page 48 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Coloring	Erythrosine Erythrosine 4R Alum	Seasoning sauces	0.05	When the same category of colors are mixed, the
	Lake (08.003) New Red New Red Alum Lake	Fruit juice (flavored) drinks, carbonated drinks, blended wines, candy, pastry decoration, green plum	0.05	quantity shall not exceed the allowances of the single color. The quantity of colors added in the solid drink and the
	(08.004)	Red and green fruit shreds, canned dyed cherries (for decoration)	0.10	high sugar fruit juices drink or the fruit taste drink should be based
Tartrazine Tartrazine Alun (08.005)	Tartrazine Alum Lake	Fruit juice (flavored) drinks, carbonated drinks, blended wine, candy, pastry decoration, canned water melon jam, green plum, shrimp (flavored) crackers, pickles, red and green fruit shreds	0.1	on the diluted multiples of its drinks.
		Ice cream	0.02	
		Plant protein drinks, drinks with lactic acid bacteria	0.05	
	Sunset Yellow Sunset Yellow Alum Lake (08.006)	Fruit juice (flavored) drinks, carbonated drinks, blended wines, candy, pastry decoration, canned water melon jam, green plum, drinks with lactic acid bacteria, plant protein drinks, shrimp (flavored) crackers	0.10	
		Candy coating, red and green fruit shreds  Ice cream	0.20	_

GAIN Report #CH9010 Page 49 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose	Note
Calarina		Emit inica (flavour d) dainte	g/kg 0.025	VVII and the second code come
Coloring	Brilliant Blue FCF	Fruit juice (flavored) drinks,	0.025	When the same category
	Brilliant Blue FCF	carbonated drinks, blended		of colors are mixed, the
	Alum Lake	wines, candy, pastry decoration,		quantity shall not exceed
	(08.007)	canned dyed cherries (for		the allowances of the
		decoration), green plum, shrimp		single color. The
		(flavored) crackers, ice cream		quantity of colors added
		Red and green fruit shreds	0.10	in the solid drink and the
				high sugar fruit juices
	Indigotine	Pickles	0.01	drink or the fruit taste
	Indigotine Alum Lake	Fruit juice (flavored) drinks,	0.10	drink should be based
	(08.008)	carbonated drinks, blended		on the diluted multiples
		wines, candy, pastry decoration,		of its drinks.
		canned dyed cherries (for		
		decoration), green plum		
		Red and green fruit shreds	0.20	
	Sodium Copper	Blended wines, candy, canned	0.50	
	Chorophyllin	green pea, fruit jelly, ice cream,		
	(08.009)	ice bars, pastry decoration, ice		
		cream bars, biscuits		
	Beta Carotene	All foods	Appropriate dose	
	(08.010)		level as required in	
			production	
	Titanium Dioxide	Candy coating	2.0	
	(08.011)	Ice and ice cream bars	10	
	Tempt Red	Candy coating	0.085	
	(08.012)	Ice cream	0.07	
		Fried chicken condiment	0.04	
	Beet Red	All foods	Appropriate dose	
	(08.101)		level as required in	
			production	
	Turmeric Yellow	Fruit juice (flavored) drinks,	Appropriate dose	]
	(08.102)	carbonated drinks, blended	level as required in	
		· ·	production	
		red and green fruit shreds,	Ī	
		canned condiments, green plum,		
		ice bars		

GAIN Report #CH9010 Page 50 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Coloring	Turmeric Yellow (08.102)	Bread, pastry, pickled vegetables	0.01g/kg(calculate d by Turmeric element)	When the same category of colors are mixed, the quantity shall not exceed
	Carthamin Yellow (08.103)	Fruit juice (flavored) drinks, carbonated drinks, blended wines, candy, pastry decoration, red and green fruit shreds, canned foods, green plum, ice cream, ice bars, fruit jelly, candied fruit	0.20	the allowances of the single color. The quantity of colors added in the solid drink and the high sugar fruit juices drink or the fruit taste drink should be based
	Lac Dye Red (08.104)	Fruit/vegetable juice drinks, carbonated drinks, blended wine, candy, fruit jam, condiment sauce	0.5	on the diluted multiples of its drinks.
	Cowberry Red (08.105)	Fruit juice (flavored) drinks, ice cream	Appropriate dose level as required in production	
	Paprika Red (08.106)	Ice cream, pastry decoration, ice cream bars, ice bars, biscuits, cooked meat products,	Appropriate dos level as required in production	
	Paprika Orange (08.107)	artificial crab meat, sauces, candy		
	Caramel Color (Plain) (08.108)	Candy, fruit juice (flavored) drinks, biscuits, soy sauce, edible vinegar, ice cream bars, ice bars, condiment sauce, ice cream	Appropriate dose level as required in production	
	Caramel Color (Ammonium Sulfite Process) (08.109)	Carbonated drinks, yellow wine, grape wine	Appropriate dose level as required in production	
	Caramel Color (Ammonia Process) (08.110)	Candy, fruit juice (flavored) drinks, biscuits, soy sauce, edible vinegar, ice cream bars, ice bars, ice cream, canned condiments	Appropriate dose level as required in production	
	Red Rice Red (08.111)	Ice cream, candy, blended wines	Appropriate dose level as required in production	

GAIN Report #CH9010 Page 51 of 177

e of Food dditive	Scope of Application	Maximum Dose g/kg	Note
Yellow ellow	Fruit juice drinks, blended wines, pastry decoration, pastry, ice cream bars, ice bars, candied fruit, extrusion foods, fruit jelly, pancakes, candy, canned chestnuts	0.3	When the same category of colors are mixed, the quantity shall not exceed the allowances of the single color. The quantity of colors added
s Yellow	Fruit juice (flavored) drinks, candy, pastry decoration	0.3	in the solid drink and the high sugar fruit juices
an Red	Fruit juice (flavored) drinks, candy, blended wines, pastry decoration	0.8	drink or the fruit taste drink should be based on the diluted multiples
Red	Cooked meat products, fruit jelly, pastry decoration, biscuits, extrusion foods, ice cream bars, ice bars	0.4	of its drinks.
low	Hydrogenated vegetable oils, candy	5.0	
ed	Fruit juice (flavored) drinks, candy, blended wines, fruit jam, condiment sauces, candied fruit, pastry decoration, pastry, ice cream bars, ice bars, fruit jelly	Appropriate dose level as required in production	
ick Pigment	Ice cream, biscuits Soy milk drink Blended wines Carbonated drinks Candy, pastry decoration	0.04 0.25 1.0 2.0 3.0	
c Rice	Blended wines, candy, cooked meat products, fermented bean	Appropriate dose level as required in	
Red (Red d)	curd, ice cream bars, ice bars, biscuits, fruit jelly, extrusion foods, condiment sauces	production	
Lubra Red	Candy Carbonated drinks Pastry decoration	0.1 0.13 0.2	
	Red	Red Candy Carbonated drinks	Red Candy 0.1 Carbonated drinks 0.13 Pastry decoration 0.2

GAIN Report #CH9010 Page 52 of 177

Category	Name of Food	Scope of Application	Maximum Dose	Note
~	Additive		g/kg	
Coloring	Black Currant Red	Carbonated drinks, sparkling	Appropriate dose	When the same category
	(08.122)	grape wines, black currant	_	of colors are mixed, the
		wines, pastry decoration	production	quantity shall not exceed
	Gardenia Blue	Fruit juice (flavored) drinks,	0.2	the allowances of the
	(08.123)	pastry decoration, blended		single color. The
		wines		quantity of colors added
		Candy, jam	0.3	in the solid drink and the
	Hippophae	Hydrogenated vegetable oil	1.0	high sugar fruit juices
	Rhamnoides L Yellow (08.124)	Pastry decoration	1.5	drink or the fruit taste drink should be based
	Roselle	Fruit juice (flavored) drinks,	Appropriate dose	on the diluted multiples
	(Hibiscus Sabdaritta)	blended wines	level as required in	_
	(08.125)		production	
	Xiang Zi Ke Brown	Blended wine	0.3	
	(08.126)	Cola type drinks	1.0	1
	NP Red	Fruit wines	3.0	1
	(08.127)	Fruit juice (flavored) drinks,	4.0	
	, ,	carbonated drinks, jam, ice bars		
		Pastry decoration	10.0	1
	Duo Sui Brown	Candy, ice cream, blended	0.4	
	(08.128)	wines		
	, ,	Cola type drinks	1.0	
	Mulberry Red	Fruit wines, fruit juice drinks	1.5	1
	(08.129)	Candy	2.0	1
	,	Fruit jelly, haw pastry	5.0	1
	Natural Amaranthus	Fruit juice (flavored) drinks,	0.25	1
	Red	carbonated drinks, blended		
	(08.130)	wines, pastry decoration, red		
	,	and green fruit shreds, green		
		plum, haw products, canned		
		dyed cherries (for decoration,		
		not edible), fruit jelly		
	Rosa Laevigata Michx		0.2	
	Brown (08.131)			
		Carbonated drinks	1.0	1
	Curcumin	Candy, ice cream, carbonated	0.01	1
	(08.132)	drinks, fruit jelly		

GAIN Report #CH9010 Page 53 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Coloring	Acid Bordeaux (08.133)	Candy, pastry Fruit juice (flavored) drinks, soy sauce, pickled vegetables	0.2 1.0	When the same category of colors are mixed, the quantity shall not exceed
	Peanut Skin Pigments (08.134)	Carbonated drinks Candy, biscuits, ham sausages	0.1	the allowances of the single color. The
	Grape Skin Red (08.135)	Blended wines, carbonated drinks, fruit juice (flavored) drinks, ice bars	1.0	quantity of colors added in the solid drink and the high sugar fruit juices drink or the fruit taste
	Lonlcera Caerulea (08.136)	Jam Candy, pastry Sparkling grape wines, ice cream, fruit juice (flavored)	1.5 2.0 1.0	drink should be based on the diluted multiples of its drinks.
	(00.130)	drinks Candy, pastry Pastry decoration	2.0 3.0	
	Algae Blue (Light, Seawater) (08.137)	Ice cream, ice bars, fruit jelly, candy, fruit juice (flavored) drinks, cheese products	0.8	
	Plant Charcoal Black (08.138)	Candy, biscuits, pastry, rice, flour products	5.0	
	Bugglegia Yellow (08.139)	Blended wines, pastry, bread, candy, fruit juice (flavored) drinks	Appropriate dose level as required in production	
	Puccoon (08.140)	Fruit juice (flavored) drinks, ice cream, ice bars, fruit wines	0.1	
	Tea Yellow (08.141) Tea Green (08.142)	Fruit/vegetable juice drinks, blended wines, pastry decoration, green fruit shreds, milk tea, fruit tea	Appropriate dose level as required in production	
	Tangerine Yellow (08.143)	Pancakes, biscuits, pastry, candy, fruit juice (flavored) drinks	Appropriate dose level as required in production	
Color Fixative	Sodium (Potassium) Nitrate (09.001)	Meat products	0.50	Measure residue amounts of Sodium Nitrate, for canned
	Sodium (Potassium) Nitrate (09.002)	Canned salted livestock/ poultry meat products  Salted ham in brine	0.15 Residue level: 0.07	meats it should not exceed 0.05 g/kg; for meat products it should not exceed 0.03 g/kg

GAIN Report #CH9010 Page 54 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Emulsifier	Sucrose Fatty Acid Esters (10.001)	Meat products, sausage, emulsifying essences, keeping fruit and eggs fresh, ice cream, candy, bread Emulsifying natural colors	10.0	
	Sodium Caseinate (10.002)	All foods	Appropriate dose level as required in production	
	Sorbitan Monostearate (Span 60) (10.003)	Plant protein drinks, fruit juice type drinks, milk, toffee, ice cream, bread, pastry, solid beverage bases, chocolate	3.0	
		Cream, instant coffee, dry yeast, hydrogenated vegetable oil	10.0	
	Sorbitant Tristearate	Turbid agent for drinks	0.05	
	(Span 65) (10.004)	Cream, hydrogenated vegetable oil, instant coffee, dry yeast	10.0	
	Sorbitant Monooleate (Span 80) (10.005)	For keeping fruit and vegetable fresh (coating)	Appropriate dose level as required in production	
		Fruit juice (flavored) type drinks Plant protein drinks, milk, bread, hydrogenated vegetable oil, pastry, toffee	0.05	
	Glycerol Monastearate (Mono, Di, Tristearate) (10.006)	All foods	Appropriate dose level as required in production	
	Xylitan Monostearate (10.007)	Pastry, bread Candy, hydrogenated vegetable oil	3.0 5.0	
		Emulsifying essences	40.0	Equivalent to 0.04 g/kg in carbonated drinks
	Sorbitan Monopalmitate	Turbid agent for drinks	0.05 (measure in finished product)	
	(Span 40) (10.008)	Fruit juice (flavored) type drinks	0.5	
Emulsifier	Sorbitan Managalmitata	Moon cakes	1.5	

Monopalmitate

GAIN Report #CH9010 Page 55 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
		Chocolate coating layer for ice cream	2.2	
		Plant protein drinks	6.0	
	Calcium Stearoyl Lactylate (10.009)	Pastry, bread	2.0	
	Diacetyl Tartaric Acid	Vegetable oil powder	5.0	
	Ester (Di)Glyceride (10.010)	Hydrogenated vegetable oil, whipped cream, bread, pastry	10	
	Sodium Stearoyl Lactylate (10.011)	Pastry, bread	2.0	
	Ester Gum	Chewing gum base agent	1.0	
	(10.012)	Emulsifying essences	100	Equivalent to 0.1 g/kg in carbonated drinks
	Hydrogenated Ester	Fruit juice (flavored) drinks	0.1	
	Gum	Chewing gum base agent	100	
	(10.013)	Emulsifying essences	100	
	Sucrose Acetate Isobutyrate (10.014)	Emulsifying essences	70.0	Equivalent to 0.14 g/kg in carbonated drinks
	Polyoxyethylene Sorbitan	Emulsifying essences	1.5	
	Monostearate (Tween 60) (10.015)	Bread	2.5	
	Polyoxyethylene	Ice cream bars, ice cream	1.0	1
	Sorbitan Monooleate (Tween 80)	Milk	1.5	1
	(10.016)	Emulsifying natural colors	10.0	]
	Polyoxyethylene Xylitan Monostearate (10.017)	Hydrogenated vegetable oil, for use in fermentation	5.0	
	Octyl An Decyl Glycerate (10.018)	Emulsifying essences	10.0	
	Modified Soybeam Phospholipides (10.019)	All foods	Appropriate dose level as required in production	

GAIN Report #CH9010 Page 56 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Emulsifier	Polylene Glycol Diesters Of Fatty Acid (10.020)	Pastry	2.0	
	PEG(10.021)	Pastry, bread	0.1	
		Ice cream	3.0	
	Polyglycerol Monostearate (10.022) Polyglycerol Monooleate	Lactic acid bacteria drinks, plant protein drinks, ice cream, ice cream bars, ice bars	10	
	(10.023) Sorbitan Monolaurate	Fruit flavored type drinks	0.5	
	(Span 20) (10.024)	Moon cakes Plant protein drinks	1.5 2.0	
		Chocolate coating layer of ice cream bars	2.2	
	Polyoxyethylene (20)- Sorbitan Monolaurate	Moon cakes	0.5	
	(Tween 20) (10.025)	Fruit juice drinks	0.75	
	Polyoxyethylene (20)-Sorbitan	Ice cream bars	1.5	
	Monopalmitate (Tween 40) (10.026)	Plant protein drinks	2.0	
	Acetylized Monoglycerol Fatty Acid Esters (10.027)	To prevent deposits in sugar refining	0.01	
	Potassium Stearate (10.023)	Pastry	0.18	
Enzyme Preparation	Papain (11.001)	Hydrolyzed animal and plant proteins, biscuits, poultry/meat products	Appropriate dose level as required in production	
	Immobilized Glucose Isomerast Preparations (11.002)	Fructose/glucose syrup	Appropriate dose level as required in production	

GAIN Report #CH9010 Page 57 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
	"-Amylase Preparations (11.003)	Starch syrup, fermented wines, distilled spirits, alcohol	Appropriate dose level as required in production	
Enzyme Preparation	Glucoamylases Preparations (11.004) Refined Pectinase	Starch syrup, fermented wines, distilled spirits, alcohol	Appropriate dose level as required in production	For fermentation and
	(11.005)	Fruit wines, fruit juices, canned tangerines in syrup (peeled)	Appropriate dose level as required in production	
	\$-Dextranase (11.006)	Beer processing	Appropriate dose level as required in production	
Flavor Enhancer	Sodium Glutamate (12.001) Disodium 5'- Guanylate (12.002) Disodium 5'-Inosinate (12.003) Dissodium 5-Ribonucleotide	All foods	Appropriate dose level as required in production	
	(12.004) Disodium Succinate (12.005)	Condiments	20.0	
Flour Treatment Agent	Benzoyl Peroxide (13.001)	Wheat flour	0.06	Calcium Carbonate used as diluting agent for Benzoyl Peroxide
	Potassium brominate(13.002)	Wheat flour	0.03	Potassium Brominate should not be detected in the finished product
	L-cysteine monohydrochloride (13.003)	Fermented flour products	0.06	
	Azobisformamide (13.004)	Wheat flower	0.045	
	Magnesium Carbonate (13.005) Calcium Carbonate (13.006)	Wheat flower Flour treatment agent Flour treatment agent	1.5 (in flour) 5.0 0.03 (in flour)	
Coating Agent	(13.006) Shellac (14.001) Paraffin (14.002)	Chocolate, waffle biscuits Chewing gum base agent	0.20 50.0	

GAIN Report #CH9010 Page 58 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
	White Oil (Liquid Paraffin) (14.003)	Release agent, fermentation process	Appropriate dose level as required in production	
Coating Agent	White Oil (Liquid Paraffin) (14.003)	To keep soft candy and hen eggs fresh	50.0	
	Morpholine Fatty Acid Salt (Fruit Paraffin) (14.004)	To keep fruit fresh	Appropriate dose level as required in production	
	Hexanepenta Tetraalcohol Ester Of Rosin (14.005)	To keep fruit and vegetables fresh	0.09	
	Ethyleneoxy (14.006) Polydimethylsilicone		0.075	
	(14.007)		0.0007	
Humectant	Sodium Phosphate Tribasic (15.001)	Canned foods, fruit juice type drinks, dairy products, plant protein drinks	0.5	When using compound phosphates, total quantity of phosphates in
		Western-style ham, meat products	3.0	canned foods, meat products should not
		Cheese	5.0	exceed 1.0 g/kg; in condensed milk it should
	Sodium Hexa Metaphosphate (15.002) Sodium	Canned foods, fruit juice (fruit flavored) drinks, plant protein drinks	1.0	not exceed 50 g/kg.  During compound use o sodium pyrophosphate, sodium triphosphate and
	Tripolyphosphate (15.003) Sodium	Dairy products, poultry products, ice cream, instant noodles, meat products	5.0	sodium phosphate tribasic, phosphates should not exceed 5
	Pyrophosphate (15.004)	Yam starch	0.025	g/kg. More phosphates may be added in
	Sodium Phosphate Monobasic (15.005)	Condensed milk	0.5	Western-style hams. However, the total quantity of phosphates should not exceed 8
	Sodium (Potassium) Phosphate Dibasic (15.006)	Condensed milk	0.5	g/kg.

GAIN Report #CH9010 Page 59 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
		Yeast powder	Appropriate dose level as required in production	
Humectant	Calcium Biphosphate (15.007)	Bread, biscuits, yeast	4.0 (measure amount of phosphate)	
		Solid beverage bases	8.0	
		Wheat flour	Appropriate dose level as required in production	Mainly used as diluting agent for Benzo Peroxide
	Disodium Dihydrogen Pyrophosphate (15.008)	Bread, biscuits	3.0	
	Potassium Phosphate Dibasic (15.009)	Vegetable fat powder	19.9	
	Potassium	Wheat flour	5.0	]
	Biphosphate (15.010)	Drinks	2.0	
Nutrition Enhancer	(16.00)	Use according to related regulations in GB 14880	Determine dose level according to GB 14880	See Annex B, for new varieties
Preservative	Benzoic Acid (17.001)	Carbonated drinks	0.2	Benzoic Acid in concentrated fruit and
	(	Low salt pickles, sauces, candied fruit	0.5	vegetable juices in plastic barrels should not
		Grape wine, fruit wines, soft candy	0.8	exceed 2g/kg. When the Benzoic Acid and
	Sodium Benzoate (17.002)			Sodium Benzoate are used simultaneously, the
		Soy sauce, vinegar, fruit jams (except for canned), fruit juice (flavored) type drinks	1.0	Benzoic Acid should not exceed the maximum dose level.
		Condensed fruit/ vegetable juices in plastic kegs used in the food industry	2.0	GOSC ICVCI.

GAIN Report #CH9010 Page 60 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Preservative	Sorbic Acid (17.003)	Meat, fish, egg, poultry products  Keep fruit and vegetables fresh, carbonated drinks		The Sorbic Acid in concentrated fruit and vegetable juices in plastic barrels should not
	Potassium Sorbate (17.004)	Gum material casing, low salt pickles, sauces, candied fruit, fruit juice (flavored) type drinks, fruit jelly	0.5	exceed 2g/kg. When Sorbic Acid and Potassium Sorbate are applied simultaneously,
		Grape wine, fruit wines	0.6	the Sorbic Acid should not exceed the maximum
		Concentrated fruit/ vegetable juice in plastic kegs used in the food industry	2.0	dose level.
		Soy sauce, edible vinegar, fruit jam, hydrogenated vegetable oil, soft candy, dried fish product, RTE (ready-to-eat) bean products, pastry, stuffings, bread, cakes, moon cakes, RTE jellyfish, drinks with lactic acid bacteria	1.0	The original shelf life should not be extended.
	Calcium Propionate (17.005)	Wet dough preparations	0.25	Measure amount of Prophonic Acid. Wet dough preparations
		Bread, edible vinegar, soy sauce, pastry, soybean products	2.5	include: ready-to-cut dough products, dumpling sheaths
	Sodium Propionate (17.006)	Pastry	2.5	Measure amount of Propionic Acid. Before the use, it must cleaned
		For processing canned red bayberries	50.0	with 3%-5% water solution.

GAIN Report #CH9010 Page 61 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Preservative	Ethyl P-Hydroxy Benzoate	For keeping fruit and vegetables fresh	0.012	Measure amount of Phydroxybenzoatic Acid
	(17.007)	Edible vinegar	0.10	
		Carbonated drinks	0.20	
		Fruit juice (flavored) type	0.25	
	Propyl P-Hydroxy	drinks, fruit jam (except for canned), soy sauce, sauces		
	Benzoate (17.008)	Pastry stuffing	0.5 (total quantity for individual or	
		Egg yolk stuffing	compound use) 0.20	1
	Dehydro Acetic Acid (17.009)	Fermented bean curd, pickles, in soy sauce, natural tangerine juice	0.30	
	Ethoxyquin (17.010)	For keeping apples fresh		Residue level: 1 mg/kg.
	Secondary Butyl Amine (17.011)	For keeping fruit fresh	Appropriate dose level as required in production	Residue level: Tangerine flesh # 0.005 mg/kg Litchi flesh: # 0.009 mg/kg Apple flesh: # 0.001mg/kg
	Cinnamic Aldehyde (17.012)	For keeping fruit fresh	Appropriate dose level as required in production	Residue level: 0.3 mg/kg
	Disodium Acetate (17.013)	Cereals, RTE bean products	1.0	

GAIN Report #CH9010 Page 62 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Preservative	Carbon Dioxide (Alcohol Fermentation Process) (17.014) Carbon Dioxide (Lime Burner Process) (17.015) Carbon Dioxide (Synthetic Ammonium Tail Gas Process) (17.016) Carbon Dioxide	Carbonated drink, sparkling wines	Appropriate dose level as required in production	Methanol level:
	(Methanol Cracking Process) (17.017) Thiabendazol	For keeping fruit fresh	0.02	< 50 Fg/kg
	(17.018) Niacin (17.019)	Canned foods, plant protein drinks	0.2	
	()	Dairy products, meat products	0.15	
	Hydrogen Peroxide (Sodium Percarbonate) (17.020)	For keeping raw milk fresh	0.3% Hydrogen Peroxide: 2.0 ml/l Sodium Monothiocyanate: 15.0mg/l	The application for keeping raw milk fresh is limited to Heilongjiang province and Inner Mongolia region. If its application is extended
		Packed dry bean curd	0.86 g/l Residue should not be detected	to other areas, a report should be submitted by the provincial health department to the Ministry of Health for approval first.

GAIN Report #CH9010 Page 63 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Preservative	b-Naphthol (17.021)	For keeping tangerines fresh	0.1	Residue level: # 70 mg/kg
	Biphenyl Ether (17.022)		3.0	Residue level: # 12 mg/kg
	2-Phenyl phenol Sodium Salt (17.023)	-	0.95	Residue level: # 12 mg/kg
	Tetra-Phenyphenol (17.024)	-	1.0	Residue level: # 12 mg/kg
	Pentacarbondial (Penta Dialdehyde) (17.025)	For keeping fruit and vegetables fresh	0.05	Residue level: # 5mg/kg
	Dodecyldimethyl Bromated Amine (17.026)		0.07	
	2,4- Dichlorobenzoloxy- acetic Acid (17.027)		0.01	Residue level: # 2.0mg/kg
	Stabilized Chloride Dioxide	For keeping fruit and vegetables fresh	0.01	
	(17.028)	Fish processing	0.05 (water solution)	
Stabilizer and Coagulant	Calcium Sulfate (18.001)	Flour treatment agent Bean products	1.5 Appropriate dose level as required in production	As diluted solution of Benzol Peroxide
	Calcium Chloride (18.002)	Bean products	Appropriate dose level as required in production	
	Magnesium Chloride (18.003)		production	
	Propylene Glycol (18.004)	Pastry	3.0	
	Ethylene Diamine Tetra Acetic Acid Disodium Salt (EDTA) (18.005)	Pickles in soy sauce, canned foods	0.25	
	Disodium Stannous Citrate (18.006)	Canned mushrooms, canned fruit and vegetables	0.3	

GAIN Report #CH9010 Page 64 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Stabilizer and Coagulant	Glucono Delta Lactone	For keeping fish and shrimps fresh	0.1	Residue level: 0.01 mg/kg
J	(18.007)	Sausages (meat sausages), fish paste products, grape juice, bean products (bean curd, jellied bean curd)	3.0	
		Yeast powder	Appropriate dose level as required in production	
	PVPP (18.008)	Beer	Appropriate dose level as required in production	
Sweetener	Saccharin Sodium (19.001)	Drinks, pickles in soy sauce, compound condiments, candied fruit, blended wines, ice cream bars, ice cream, ice bars, pastry, biscuits, bread Melon seeds	0.15	Measure amount of saccharin. Include high-sugar fruit juice (flavored) drinks using 80% of the diluting coefficient.
		Preserved plums, dried tangerine peels	5.0	May be used with other specified sweetener.
Sweetener	Sodium Cyclamate (19.002)	Pickles, condiment sauces, blended wines, pastry, biscuits, bread, ice cream bars, ice cream, ice bars, drinks	0.65	specified sweetener.
		Candied fruit Dried tangerine peels, preserved plums, preserved prunes, dry red bayberries	1.0 8.0	
	Palatinose (19.003)	Ice cream bars, ice bars, candy, drinks, pastry, biscuits, fruit jam (except for canned), blended wines	Appropriate dose level as required in production	
	Aspartame (19.004)	All foods (Except for canned food)	Appropriate dose level as required in production	The aspartame food is marked "Persons suffering from Phenylketonuria should not consume."

GAIN Report #CH9010 Page 65 of 177

Category	Name of Food	Scope of Application	Maximum Dose	Note
	Additive		g/kg	
Sweetener	Maltitol		Appropriate dose	
	(19.005)	drinks, biscuits, bread, pickles in	_	
		soy sauce, candy	production	
		Fish paste and fish paste	0.5	
	Sorbitol Syrup	products		
	(19.006)	Pastry	5.0	
		Processing bean products, sugar	Appropriate dose	1
		refining, brewing	level as required in	
			production	
	Xylitol	Candy, pastry, drinks	By substitution of	The mark indicates that
	(19.007)		sugar, appropriate	Xylitol is fit for diabetic
			dose level as	consumption.
			required in	
			production	
	Stevioside	Candy, pastry, drinks	Appropriate dose	
	(19.008)		level as required in	
			production	
	Glycyrrhiza	Canned poultry/meat,	Appropriate dose	1
	(19.009)	condiments, candy, biscuits,	level as required in	
	Mono(Tri)Potassium	candied fruit, ice and ice cream	production	
	Glycyrrhizinate	bars, drinks		
	(19.010)	,		
	Potassium Acetyl	Drinks, ice cream, candy, fruit	0.3	1
	Sulfanilamide	jam (except for canned), pickles		
	(19.011)	in soy sauce, candied fruit,		
	,	chewing gum		
		Table sweetener (pieces,	40 mg by piece,	1
		powder)	package	
	Ammonium	Canned meat, candy, biscuits,	Appropriate dose	1
	Glycyrrhizinate	ice and ace cream bars, drinks,	level as required in	
	(19.012)	condiments	production	
	L-"-aspartame-N-	Drinks, ice cream, ice cream	0.1	1
	(2,2,4,4-tetramethyl-	bars		
	3-trimethylene	Chewing gum, dried tangerine	0.3	-
	sulfide)-D-alanyl	peels, preserved plums,	0.5	
	amine	<b>-</b>		
	(Altame)	preserved prunes, dried red		
	(19.013)	bayberries Table syvestemen	0.15 a by:	
	(	Table sweetener	0.15 g by	
			package, piece	

GAIN Report #CH9010 Page 66 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Thickener	Agar (20.001)	All foods	Appropriate dose level as required in production	
	Gelatine (20.002)	All foods	Appropriate dose level as required in production	
	Carboxymethyl Cellulose Sodium (20.003)	Drinks (except for solid beverage bases) Instant noodles	5.0	
	(201002)	Ice cream bars, ice bars, pastry, biscuits, fruit jelly, extrusion foods	Appropriate dose level as required in production	
	Sodium Agitate (20.004) Potassium Agitate (20.005) Pectin (20.006)	All foods	Appropriate dose level as required in production	
	Carrageenan (20.007)		- 0	
	Arabic Gum (20.008)	Drinks, chocolate, ice cream, fruit jam	5.0	
	Xanthan Gum (20.009)	Drinks Bread, dairy products, meat products, fruit jam, fruit jelly variety of sauces	1.0 2.0	
	Xanthan Gum (20.009)	Noodle, pastry, biscuit, crunchy butter, instant coffee, fish products, ice cream bar, ice bar, ice cream	10.0	
	Propylene Glycol Alginate (20.010)	Beer, drinks Ice cream Emulsifying essences	0.3 1.0 2.0	
		Dairy products, fruit juices Chewing gum, chocolate, condensed milk, hydrogenated vegetable oil, sauces, plant protein drinks	3.0 5.0	
	Tamarind Seed Polysaccharide Gum (20.011)	Ice cream, fruit jelly, candy	2.0	

GAIN Report #CH9010 Page 67 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Thickener	Sodium Carboxy	Bread	0.02	
THEREIG	Methyl Starch	Ice cream	0.06	
	(20.012)	Sauces, fruit jam	0.00	1
	Sodium Phosphate	Cereals, fruit jam, drinks, soup	Appropriate dose	Cereal products
	Starch	bases, ice cream, cream,		-
			_	are products made
	(20.013) Hydroxy-propyl	condiments Ice cream	production 12.0	of staple foods.
	Amylase (20.014)	Fruit jam, fruit jelly, luncheon	30.0	-
	(20.014)	pork, soup bases		
	Acetylated Distarch	Luncheon pork	0.5	
	Phosphate (20.015)	Fruit jam	1.0	1
	Hydroxyl Propyl	Ice cream	0.3	1
	Distarch Phosphate (20.016)	Fruit jelly	2.5	1
	Phosphated Distarch	Instant noodles, noodles	0.2	1
	Phosphate (20.017)	Solid beverage bases	0.5	1
		Fruit jam	1.0	1
	Chitine	Beer	0.4	1
	(20.018)	Edible vinegar	1.0	1
		Egg yolk paste, peanut butter,	2.0	1
		sesame butter, dehydrogenated		
		vegetable oil, ice cream,		
		vegetable fat powder		
		Lactic acid bacteria drinks	2.5	
		Fruit jam	5.0	
	Abelmoschus Manibot	Ice cream bars, ice bars	5.0	1
	Gum (20.019)	Bread, biscuits, pastry, fruit jam	10.0	
	Flax Seed Mucilage	Ice cream	0.3	1
	(20.020)	Dried fine noodles	1.5	1
	Sesabania Gum	Plant protein drinks	1.0	1
	(20.021)	Dried fine noodles, instant	2.0	1
		noodles, bread		
		Ice cream	5.0	1
	Polydextrose	Barbecued foods, candy, salad	Appropriate dose	1
	(20.022)	dressings, pastry, ice cream	level as required in	
	(/	bars, ice bars, fruit jelly, chewing gum	1	
		Drinks (liquid, solid bases)	25-50	As soluble cellulose
				substances

GAIN Report #CH9010 Page 68 of 177

Category	Name of Food Additive	Scope of Application	Maximum Dose g/kg	Note
Thickener	Lucost Bean Gum	Fruit jelly, fruit jam,	5.0	
	(20.023)	Ice cream		
	\$-Cyclodextrin	Barbecued foods	2.5	
	(20.024)	Soup bases	100	
	Guar Gum	All foods	Appropriate dose	
	(20.025)		level as required in	
			production	
Other	Potassium	Wine, starch	0.5	Manganese residue in
	Permanganate			wines:
	(00.001)			# 2 m/kg
	4-Chlorophenoxy	Bean sprouts		Residue:
	Acetic Sodium Salt	Bean sproats		# 1 mg/kg
	(00.002)			# 1 mg/kg
	Isomerized Lactose	Fresh milk, drinks (solid bases,	1.5	Measure amount of
	Syrup	liquid)	1.3	dried substance of
	(00.003)	Biscuits	2.0	Isomerized Lactose.
	(00.003)			isomerized Lactose.
	T. I. C. O'I.E.	Milk powder	15.0	
	Lubricating Oil For	For lubricating machinery in the	Appropriate dose	
	Food Machine	food industry	level as required in	
	(00.004)		production	
	Sucrose	Sugar refining	0.1	
	Polypropylene Ether			
	(Sugar Aids)			
	(00.005)			
	Immobilized Tannin	Low-proof liquors, fruit wines	Appropriate dose	
	(00.006)	1 ,	level as required in	
	(00.000)		production	
			production	
	Caffeine	Cola drinks	0.15	
	(00.007)	Cold diffines	0.15	
	Potassium Chloride	Mineral drinks	0.025	
	(00.008)	Sports drinks	0.2	1
		Soy sauce of low sodium salt	60.0	
		Low sodium salt	350.0	1
	6-Benzylgland-Purine	For sprouting soybean	0.01	Residue:
	(00.009)	For sprouting soybean	0.01	# 0.2 mg/kg
	Afapulgito Clay	Filtering agent, absorber	Appropriate dose	
	(00.010)		level as required in	
			production	

GAIN Report #CH9010 Page 69 of 177

Category	Name of Food	Scope of Application	Maximum Dose	Note
	Additive		g/kg	
Other	Lauric Acid	Fruit, fruit and vegetable peels	3.0	
	(00.011)			
	Pentaerythritol	For keeping fruit and vegetable	0.09	
	Abietate	fresh		
	(00.012)			
	Octyle Phenyl		0.0075	
	Polythy-leneoxy			
	(00.013)			
	Dimethyl-		0.0009	
	mercaptosilane			
	(00.014)			
Flavoring	Flavoring Permitted	For compounding a variety of	Appropriate dose	See Annex A for list of
	for Use and Flavoring	food flavorings	level as required in	food flavorings
	Temporarily Permitted		production	
	for Use			
	Hawthornpit Smoke	Fish products, meat products,	1.0	
	Flavoring No. 1	poultry products, soybean		
	Hawthornpit Smoke	products		
	Flavoring No. 2	ĺ		
	Wild Chrysanthemum	Mother chrysanthemum drinks	5.2	
	Concrete	Essences	6.3	
	Wood Acetic Acid	For compounding a variety of		
	"-Cyclopentyl	essences		
	Cyclopentanol			

# Annex A (Normal Annex) List of Food Flavorings

# A1 Variety of Food Flavorings Permitted for Use Amounts to 574 Kinds

# A1.1 Natural Flavorings: 140 Kinds

**List A1 Natural Flavorings** 

Series No.	English Name	FEMA Numbering	Chinese Coding
1	abelmoschus moschatus	-	
2	aglaia odorata flower concrete	-	N 094
3	aglaia odorata flower oil	-	N 092
4	aglaia odorata flower tincture	-	N 093
5	amyris oil	-	-
6	angelica dahurica (glabra) tincture	-	N 033
7	angelica root extract	2087	N 073

GAIN Report #CH9010 Page 70 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
8	anethole (anise camphor)	2086	N 009
9	apricot kennel oil	2105	-
10	arhat fruit tincture	-	N 065
11	atractylis oil	-	N 052T
12	Bergamot oil	2153	N 101
13	black currant concrete	2346	N 139
14	black currant tincture	2346	N 138
15	black tea tincture	-	N 041
16	buchu leaves oil	2169	N 022
17	capsicum tincture	2233	N 142
18	cardamon tincture	2240	N 011
19	cardamon seed oil	2241	N 010
20	4-carvomenthenol	2248	-
21	cassie concrete	22601)	N 066
22	cassia bark tincture	2257	N 040
23	cassia oil	2258	N 039
24	castoreum tincture	2261	N 115
25	cedarwood (cypress) oil	2267 <sup>2)</sup>	N 084
26	celery flower oil	-	N 048
27	celery seed oil	2271	N 049
28	chamomile flower, roman, oil	2275	_
29	chicory concrete	2280	N 134
30	chives oil	-	N 107
31	chrysanthemum Hangzhou flower extract	_	N 060
32	chrysanthemum Hangzhou flower oil	_	N 059
33	clary sage oil	2321	N 108
34	clove bud oil	2323	N 003
35	clove bud tincture (extract)	2322	N 002
36	clove (leaf) oil	2325	N 001
37	cocoa tincture	-	N 023
38	coffee tincture	-	N 064
39	cognac oil, natural	2331	N 017
40	coriander seed oil	2334	N 047
41	costus root oil	2336	N 019T
42	cumin oil	2343	N 085
43	cyperus oil	23 13	N 106
44	Dai Dai flower concrete	2771	N 081
45	Dai Dai flower oil	2771 <sup>3)</sup>	N 080
46	Dai Dai fruit oil	2771	N 081

GAIN Report #CH9010 Page 71 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
47	Davina oil	2359	N 042
48	eucalyptus oil (eucalyptus globulus labile)	2466	N 114
49	fennel oil sweet	2483	N 129
50	fennel tincture	-	N 012
51	fenugreek tincture	2485	N 079
52	geranium rose oil	2508	N 097
53	geranium oil terpene less	2508	N 098
54	ginger concrete	2523	N 036
55	ginger oil	2522	N 075
56	grape-fruit oil	2530	N 051
57	green tea tincture	-	N 127
58	hawthorn-pit smoke flavoring No.1	-	A 3077 T
59	hawthorn-pit smoke flavoring No.2	-	A 3078 T
60	hawthorn fruit tincture	-	N 014
61	hops concrete	2579	N 113
62	hops tincture	2578	N 112
63	jasmine concrete (jasminum grandiflorum L.)	2599	N 069
64	jasmine absolute (jasminum grandiflorum L.)	2598	N 068
65	jasminum sambac flower absolute	-	N 124
66	juniper berry oil	2604	N 046
67	labdanum concrete	2610	N 063
68	laurel leaf oil	2125	N 020
69	lavender oil	2622	N 153
70	lemon grass oil	2624	N 090
71	lemon leaf oil	-	N 089
72	lemon oil (steam distillation, expression, cold-grounding)	2625	N 86
73	licorice extract	2628	N 027
74	licorice tincture	-	N 026
75	lime oil (cold grounding, distilling)	2631	N 034
76	litsea cubeba oil	-	N o31
77	longan tincture	-	N 121
78	lovage oil	2651	-
79	mandarin oil (steam distillation, expression)	2657	N 110
80	mandarin oil, terpene less	-	N 111
81	maple concrete	-	N 062
82	maple oil	-	N 061
83	mentha arvensis oil	-	N 150
84	mentha arvensis oil, partially dementholized	-	N 151
85	L-menthol, natural	2665	N 013

GAIN Report #CH9010 Page 72 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
86	michelia alba flower absolute	-	N 031
87	michelia alba flower concrete	-	N 032
88	michelia alba flower oil	-	N 029
89	michelia alba leaf oil	1	N 030
90	murraya paniculate (Jiulixing flower con)	-	N 006 T
91	oakmoss concrete (Evernia prunastri concrete)	-	N 148
92	orange oil (distilling, expressing, cold-grounding)	-	N 131
93	orrises root concrete	2829	N 057
94	orris root oil	2830	N 058
95	osmanthus fragrans flower absolute	3750	N 118
96	osmanthus fragrans flower concrete	-	N 120
97	osmanthus fragrans flower tincture	-	N 119
98	paprika oleoresin	2834	N 143
99	patchouly oil	2838	N 007
100	peppermint oil (Mentha piperita)	2848	N 137
101	petit grain oil	2855	N 149
102	prunus mume tincture	-	N 021
103	red date tincture	-	N 053
104	rose absolute	2988	N 055
105	rose concrete	-	N 056
106	rose crimson glory flower absolute	-	N 146
107	rose crimson glory flower concrete	-	N 147
108	rose oil	2989	N 054
109	sandalwood oil	3005	N 152
110	sarco Dactylis oil	-	N 072
111	sophora japonica flower absolute	-	N 140
112	sophora japonica flower concrete	-	N 141
113	soya bean, fermented, tincture	-	N 045
114	spearmint oil	3032	N 122
115	spikenard oil	-	N 025
116	star anise oil	2096	N 005
117	stevia rebaudiana oil (sweet chrysanthemum oil)	-	N 130
118	sweet, orange oil, terpeneles	2822	N 122
119	tagetes oil (marigold oil)	3040	N 008
120	tolu balsam	3070	N 044
121	tolu balsam tincture	3069	N 043
122	torreya husk (grandis shell) concrete	-	N 109
123	tree moss absolute (Evernia furfuracea absolute)	-	N 095
124	tree moss concrete (Evernia furfuracea concrete)	-	N 096

GAIN Report #CH9010 Page 73 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
125	tuberose concrete	-	N 135
126	turmeric concrete	3068	N 078
127	turmeric oil	-	N 076
128	turmeric oleoresin	3087	N 077
129	valerian root oil	3100	N 145
130	vanilla bean concrete	3105	N 105
131	vanilla bean tincture	-	N 104
132	vertiver oil	-	N 102
133	vertiver concrete	-	N 103
134	violet leaf concrete	-	N 136
135	vitex cannabitolia leaf oil	-	N 050 T
136	walnut hull concrete	3111	N 123
137	wild rose concrete	-	N 128
138	wintergreen oil, natural	3113	N 028
139	Xiang Feng Cha oil	-	N 099 T
140	ylang ylang oil	3119	N 067
1)	is refined oil		
2)	is leaf oil		
3)	is bitter orange oil like Dai Dai flower oil		

# A1.2 Synthetic Flavoring, 434 Kinds in All

**List A2 Synthetic Flavorings** 

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
1	acetaldehyde diethyl acetal	2002	11132
2	acetic acid	2006	11321
3	acetophenone	2009	11253
4	2-acetyl-3-ethylpyrazine	3250	11816
5	2-acetylfuran	3163	11273
6	2-acety-5-methylfuran	3609	11274
7	acetyl pyrazine	3126	11815
8	2-acetylthiizole	3328	11826
9	adipic acid	2011	11333
10	\$-alanine	3252	11349
11	ally cinnamate	2022	A 3057 T
12	amyl alcohol	2056	11006
13	amyl butyrate	2059	11453

GAIN Report #CH9010 Page 74 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
14	"-amyl cinnamaldehyde	2061	A 3010 T
15	amyl formate	2068	11383
16	amyl heptanooate (heptylate)	2073	11499
17	amyl hexanoate	2074	11492
18	anisyl acetate	2098	11412
19	anisyl alcohol	2099	11042
20	artificial cognac oil	-	A 3076 T
21	benzaldehyde glyceryl acetal	2129	A 3008 T
22	benzoic acid	2131	11343
23	benzothiazole	3256	11829
24	benzyl benzoate	2138	11517
25	benzyl butyrate	2140	11464
26	benzyl cinnamate	2142	11530
27	benzyl formate	2145	11386
28	benzyl propionate	2150	11437
29	benzyl isobutyrate	2141	11465
30	benzyl mercaptan	2147	-
31	bis (2-methyl-3-furyl)-disulfide	3259	-
32	borneol	2157	11028
33	bornyl acetate	2159	11413
34	1-butanethiol	3478	11783
35	1-butanol(butyl alcohol)	2178	11004
36	3-butylidenephthalide	3333	-
37	butyl acetate	2174	11398
38	butyl butyryl lactate	2190	A 3056
39	butyl butyrate	2186	11448
40	butyl formate	2196	11382
41	butyl heptylate	2199	11498
42	butyl isobutyrate	2188	11452
43	butyl isovalerate	2218	11479
44	butyl lactate	2205	11527
45	butyl 2-methylbutyrate	3393	11450
46	butyric acid	2221	11324
47	butyraldehyde	2219	11135
48	(-butyrolactone	3291	11708
49	camphene	2229	11737
50	camphor	2231	-
51	L-carvone	2249	11252
52	carvy acetate	2250	11427

GAIN Report #CH9010 Page 75 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
53	\$-caryophyllene	2252	11731
54	\$-caryophyllene alcohol	-	-
55	cedryl acetate	-	11422/T
56	1,8-cinole	2465	11740
57	cinnamic acid	2288	11346
58	cinnamyl acetate	2293	11415
59	cinnamic aldehyde	2286	11192
60	cinnamyl cannamate	2298	11532
61	cinnamyl isovalerate	2302	-
62	cis -3-hexen-al	2561	11148
63	cis-3-hexen-1-yl acetate	3171	11423
64	cis-3-hexenyl ben-zoate	3688	11518
65	cis -3-hexenyl bu-tyrate	3402	11459
66	cis -3-hexenyl formate	3353	-
67	3-hexenyl isovalerate	3498	11481
68	3-hexenyl-2-methyl butyrate	3497	11460
69	cis -6-nonenal	3580	11164
70	cis -5-octen-1-ole	3722	11017
71	citral	2303	11190
72	citral diethyl acetate	2304	A 3006 T
73	citric acid	2306	11345
74	citronellal	2307	11189
75	dl-citronellol	2309	11041
76	citronellyl acetate	2311	11416
77	citronellyl formate	2341	11388
78	citronellyl propionate	2316	11436
79	m-cresol	3530	11106
80	o-cresol	3460	11105
81	p-cresol	2337	11104
82	p-cressyl acetate	3073	11413
83	<i>p</i> -cresyl methyl ether	2681	11081
84	p-cressyl phenylacetate	3077	A3053 T
85	cuminaldehyde	2341	11187
86	L-cysteine	3263	11351
87	a-damascone	3659	11258
88	damascenone	3420	11259
89	\$-damascone-4-(2,5,6trimethyl-cyclohex-1-enyl)bur-2-		
	en-4-one)	3243	<u>  -</u>
90	(-decalacetone	2360	11706

GAIN Report #CH9010 Page 76 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
91	*-decalactone	2361	11712
92	decanoic acid	2364	11339
93	1-decanol (decayl alcohol)	2365	11022
94	2-decenal	2366	11169
95	decyl acetate	2367	11409
96	dibutyl sulfide	2215	11791
97	1,2-di (1=-ethoxy-ethoxy) propane	3534	-
98	diethyl malonate	2375	11431
99	2,3-diethyl-5-methylpyrazine	33336	11817
100	2,3-diethylpyrazine	3136	11813
101	diethyl sebacate	2376	A 3048 T
102	diethyl succinate(diethyl butanedioate)	2377	11446
103	dihydrocarvyl	2380	11428
104	dihydrocoumarin	2381	11742
105	dihydro-\$-ionol	3627	11046
106	5,7-dihydro-2-methylthieno(3,4,d)pyrimidine	3338	A 3068 T
107	4,5-dihydro-3(2h)-thiophenon	3266	11271
108	2,3-dimercaptobutane	3477	11803
109	3,4-dimethoxy benzaldehyde	3109	11183
110	<i>p</i> -dimethoxy benzene	2386	11113
111	dimethyl benzyl carbinol	2393	11049
112	3,5-dimethyl-1,2-cyclopentadione	3269	-
113	dimthyl disulfide	3536	11789
114	2,3-dimethyl-2,5-dihydroxy-1,4-dithiane	3450	A3067T
115	2,6-dimethyl-5-heptenal	2389	11155
116	2,5-dimethyl-4-methoxy-3(2h)-furanone	3664	-
117	2,5-dimethyl pyrazine	3272	11807
118	dimethyl sulfide	2746	11788
119	4,5-dimethy thiazole	3274	-
120	3,5-dimethyl-1,2,4-trithiolane	3541	11304
121	dimethyl trisulfide	3275	11790
122	(-dodecalactone	2400	11707
123	*-dodecalactone	2401	11714
124	2-dodecenal	2402	11175
125	2-ethyl-3-methoxy pyrazine	3280	A3066T
126	ethyl acetate	2414	11392
127	1-ethyl-2-acetylpyrrole	3147	-
128	ethyl aetoacetate	2415	11393
129	ethyl acetylpropanoate	2442	11397

GAIN Report #CH9010 Page 77 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
130	ethyl acrylate	2418	-
131	ethyl benzoate	2422	11514
132	ethyl butyrate	2427	11442
133	2-ethylbutyric acid	2429	11327
134	ethylcaprylate	2449	11501
135	ethyl cis-4,7-octadienoate	3682	11503
136	3-ethyl-2-hycroxy-2-cyclo-penten-1-one	3152	11239
137	ethyl decanoate	2432	11509
138	ethyl formate	2434	11381
139	2-ethylfuran	3673	11272
140	4-ethyl guaiacol	2436	11115
141	ethyl heptylate	2437	11496
142	ethyl-3-hexenoate	3342	11488
143	ethyl hexylate (caproate)	2439	11487
144	ethyl 3-phenylpropionate(ethyl	2455	-
	hydrocinnamate)		
145	ethyl 3-hydroxybutyate	3428	11445
146	ethyl maltol	3487	A3005
147	ethyl 2-methyl butyrate	2443	11444
148	2-ethyl-4-methylthiazole	3680	11824
149	ethyl-3-hydroxylhexanoate	3545	11489
150	ethyl isobutyrate	2428	11443
151	ethyl isovalerate	2463	11477
152	ethyl lactate	2400	11526
153	ethyl laurate	2441	11511
154	2-ethyl-3-methyl-4-hydroxy-dihydro-(2,5)-furan-5-one	3153	11270
155	ethyl 2-methyl-4-pentenoate	3489	A3043T
156	ethyl 3-methylthiopro-pionate	3343	117999
157	ethyl myristate	2445	11536
158	ethyl nonanoate	2447	11508
159	ethyl oleate	2450	11537
160	ethyl palmitate	2451	11538
161	p-ethylphenol	3156	11111
162	ethyl 3-phenylglycidate	2454	-
163	ethyl propionate	2456	11430
164	ethyl thioacetate	3282	-
165	ethyl tiglate	2460	11524
166	10-ethyl undecylenate	2461	A3049T
167	ethyl valerate	2462	11475

GAIN Report #CH9010 Page 78 of 177

Series No.	English Name	FEMA	Chinese
1.00	1	Numbering	Coding
168	eugenol	2467	11101 11039
169	farnesol	2478	
170	fenchyl alcohol	2480	11026
171	fumaric acid	2488	11347
172	furfural	2489	11196
173	furfuryl acetate	2490	-
174	3-(2-furry)-acrolein	2494	11134
175	4-(2_furyl)-3-buten-2-one	2495	11267
176	furfuryl mercaptan	2493	11787
177	furfuryl methyl sulfide	3160	-
178	furfuryl thioacetae	3162	11797
179	furfurythiol formate	3158	-
180	N-furfuryl pyrrole	3284	11830
181	fusel oil, refined	2497	11029
182	geraniol	2507	11040
183	geranyl acetate	2509	11417
184	geranyl butyrate	2512	11469
185	geranyl formate	2514	11387
186	geranyl isobutyrate	2513	11470
187	geranyl isovalerate	2518	11484
188	geranyl phenylacetate	2516	-
189	geranyl propionate	2517	11435
190	L-glutamic acid	3285	11353
191	glycine	3287	11352
192	glycolcinnamaldehyde	-	-
193	2,4-heptadienal	3164	11156
194	(-heptalactone	2539	11703
195	heptanoic acid	3348	11336
196	1-heptanol	2548	11013
197	2-heptanone	2544	11244
198	2-heptanone	2545	-
199	4-heptenal	3289	11153
200	4-heptene-3-one	-	-
201	heptyl acetate	2547	11403
202	heptyl isobutyrate	2550	-
203	1-hexadecanol	2554	11025
204	(-hexalactone	2556	11702
205	*-hexalactone	3167	11709
206	3,4-hexanedione	3168	11243

GAIN Report #CH9010 Page 79 of 177

Series No.	English Name	FEMA	Chinese
	-	Numbering	Coding
207	1,6-hexanedithiol	3495	11786
208	hexanoic acid(caproic acid)	2559	11332
209	1-hexanol	2567	11010
210	2-hexenal	2560	11147
211	2-hexen-1-o1	2562	11011
212	4-hexen-1-o1	3430	11012
213	cis-3-hexen-1-o1	2563	11027
214	2-hexen-1-y1 acetate	2564	11402
215	4-hexen-3-one	3352	11241
216	3-hexenoic acid	3170	11335
217	hexyl acetate	2565	11401
218	hexyl benzoate	3691	11516
219	hexyl butyrate	2568	11457
220	hexyl formate	2570	11385
221	hexyl hexanoate	2572	11494
222	3-hydroxy-2-butanone	2008	11232
223	hydroxy citronellal	2588	A3017T
224	4-hydro-2,5-dimethyl-3-(2h) furanone	3174	-
225	4-(p-hydroxyphenyl)-2-butanone	2588	11257
226	indole	2593	11300
227	"-ionol	3624	11044
228	\$-ionol	3625	11045
229	"-irone	2597	11261
230	isoamyl acetate	2055	11400
231	isoamyl alcohol	2057	11008
232	isoamyl benzoate	2058	-
233	isoamyl butyrate	2060	11454
234	isoamyl formate	2069	11384
235	isoamyl hexanoate	2075	11493
236	isoamyl isovalerate	2085	11480
237	isoamyl 2-methyl butyrate	3505	11455
238	isoamyl octanoate	2080	11504
239	isoamyl phenylacetate	2081	11522
240	isoamyl propionate	2082	11433
241	isoamyl salicylate	2084	11535
242	<i>iso</i> -butanol	2179	11005
243	isobutyl acetate	2175	11399
244	isobutyric acid	2222	-
245	isobutyl butyrate	2187	11449

GAIN Report #CH9010 Page 80 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
246	isobutyl 3-(2-furan) propionate	2198	A3035T
247	isobutyl propionate	2212	11432
248	2-isobutylthiazole	3134	11828
249	iso-eugenyl methyl ether	2476	11082
250	dl-isomenthone	3460	11266
251	"-iso-methylionone	2714	A3024T
252	isopentyl isobutyrate	3507	11456
253	iso-propyl acetate	2926	11393
254	isopropyl isobutyrate	2937	-
255	5-isopropy-2-methylpyrazine	3554	11818
256	2-isopropy-4-methylthiazole	3555	11827
257	isopulegol	2962	11032
258	isopulegyl acetate	2965	-
259	isovaldehyde	2692	11140
260	isovaleric acid	3102	11331
261	lactic acid	2611	-
262	lauric acid	2614	11340
263	lauryl alcohol	2617	11024
264	leaf isobutyrate	-	11473
265	L-leucine	3297	11354
266	d-limonene	2633	11734
267	linalcol oxide	3746	11031
268	linalyl butyrate	2639	11471
269	linalyl isobutyrate	2640	11472
370	linalyl propionate	2645	11439
371	maltol	2656	11108
372	1-p-menthene-8-thiol	3700	-
373	p-mentha-8-thiol-3-one	3177	-
274	menthone	2667	11265
275	menthyl acetate	2668	11414
276	p-menth-1-ene-9-al	3178	11195
277	2-mercapto-3-butanol	3502	A3001T
278	3-mercapto-2-butanone	3298	A3019T
279	3-mercapto2-pentanone	3300	A3021T
280	DL-menthionine	3301	11355
281	<i>p</i> -methoxyacetophenone	2005	11255
282	2-methoxy-4-methylphenol	2671	11110
283	2-methoxy-3-isobutyl pyrazine	-	-
284	2-methoxy-3-methyl pyrazine	3183	A3063T

GAIN Report #CH9010 Page 81 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
285	2-methoxy-4-vinyphenol	2675	11112
286	methyl acetate	2676	11391
287	1-methyl-2-acetyl-pyrrole	3184	-
288	4=-methyl acetophenone	2677	11254
289	<i>p</i> -methyl benzaldehyde	3068	-
290	methyl benzoate	2683	11513
291	2-methyl-2-butanal	3407	11137
292	methyl butyrate	2693	11440
293	2-methylbutyric acid	2695	11326
294	2-methylbutyl aldehyde	2691	11136
295	2-methylbutyl 2-methylbutyrate	3359	11451
296	methyl caprylate	2728	11500
297	methyl cinnamate	2698	11528
298	6-methylcoumarin	2699	A3026T
299	1-methyl -2,3-cyclhexadione	3305	-
300	methyl cyclopentenolone	2700	11240
301	4-(3,4-methylene-dioxyphenyl)-2-butanone	2701	A3022T
302	methyl ethyl ketone	2170	11231
303	methyl eugenol	2475	11103
304	2-methyl-3-furanthiol	3188	A3061T
305	5-methylfurfural	2702	11197
306	5-methyl-2-hepten-4-one	3761	-
307	6-methyl-5-hepten-2-one	2707	11246
308	5-methyl-3-hexen-2-one	3409	11242
309	methyl hexanoate	2708	11485
310	methyl isobutyrate	2694	-
311	methyl isovalerate	2753	-
312	methyl mercaptan	2716	11781
313	methyl <i>n</i> -methylanthranilate(dimethyl anthra-nilate)	2718	-
314	methyl 2-methyl butyrate	2719	11441
315	methyl 3-(methylthio)propionate	2720	11798
316	methyl myristate	2722	11512
317	methyl 2-nonenoate	2725	11507
318	methyl 3-nonenoate	3710	-
319	methyl octyne carbonate	2726	-
320	2-methyl-2-pentenal	3194	11143
321	2-methyl-2-pentenoic acid	3195	11330
322	3-methyl-2-pentyl-2-cyclopenten-1-one	3763	-
323	4-methyl-2-phenyl-2-pentenal	3200	11144

GAIN Report #CH9010 Page 82 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
324	3-(methylthio) propionaldehyde	2747	-
325	methyl propionate	2742	-
326	2-methyl-4-propyl-1,3-oxathiane	3578	-
327	2-methyl pyrazine	3309	11805
328	3-methylthio-1-hexanol	3438	-
329	4-methylthiazole	3716	11820
330	methyl-2-thiofuroate	3311	-
331	2-methylvaleraldehyde	3413	11141
332	2-methylvaleric acid	2754	11329
333	4-methyl-5-vinylthiazole	3313	-
334	2-methylundecanal	2749	11162
335	myrcene	2762	11733
336	myristic aci	2764	11341
337	nerol	2770	11047
338	nerolidol	2772	11048
339	neryl acetate	2773	11420
340	neryl isobutyrate	2775	-
341	2,4-nonadienal	3212	11165
342	2,6-nonadien-1-o1	2780	11021
343	*-nonalactone	3356	11711
344	1,3-nonanediol acetate	2783	11408
345	2-nonanone	2785	11248
346	2-nonenal	3213	11163
347	nonoic acid	2784	11338
348	nonyl acetate	2788	11407
349	nonyl alcohol	2789	11018
350	nonyl isovalerate	2791	11482
351	nonyl octanoate	2790	11505
352	nootkatone	3166	11251
353	ocmene	3539	11736
354	2-octanol	2801	11015
355	3-octyl acetate	3583	11405
356	(-octalactone	2796	11704
357	*-octalactone	3214	11710
358	octanoic acid	2799	11337
359	1-octanol	2800	11014
360	2-octenal	3215	11158
361	1-octen-3-ol	2805	11016
362	1-octen-3-yl acetate	3582	11406

GAIN Report #CH9010 Page 83 of 177

Series No.	English Name	FEMA	Chinese
		Numbering	Coding
363	1-octen-3-yl butyrate	3612	11463
364	octyl acetate	2806	11404
365	octyl 2-methylbutyrate	3604	11462
366	palmitic acid	2832	11342
367	pentadecanolide	2840	11715
368	2,4-pentadienal	3217	11145
369	2,3-pentanedione	2841	11238
370	2-pentanone	2842	11236
371	2-pentanol	3316	11007
372	2-pentenal	3218	11142
373	1-penten-3-o1	3584	11009
374	2-pentylpyridine	3383	A3072T
375	phenethyl alcohol	2858	11035
376	phenethyl formate	2864	11389
377	phenethyl isobutyrate	2862	11468
378	phenethyl 2-methylbutyrate	3682	11467
379	phenethyl phenylacetate	2866	11523
380	phenethyl propionate	2867	11433
381	2-phenoxyethyl isobutyrate	2873	-
382	phenylacetaldehyde dimethyl acetal	2876	11185
383	phenylacetic acid	2878	11344
384	L-phenylalanine	3585	11350
385	2-pheny-2-butenal	3224	11138
386	3-phenylpropionaldehyde	2887	11186
387	"-pinene	2902	11738
388	\$-pinene	2903	11739
389	L-proline	3319	-
390	1,-propanediol (propylene glycol)	2940	11001
391	propanetriol (glycerol)	2525	11002
392	propionaldehyde	2923	11133
393	propionic acid	2924	11322
394	propyl acetate	2925	11394
395	propyl benzoate	2931	11515
396	propyl heptylate	2948	11497
397	propyl hexanoate	2949	11491
398	propyl thioacetate	3385	-
399	pyridine	2966	11835
400	pyruvic acid	2970	11323
401	rhodinol (from geranium oil)	2980	11037

GAIN Report #CH9010 Page 84 of 177

Series No.	English Name	FEMA Numbering	Chinese Coding
402	rum ether (ethyl oxyhydrate)	Numbering 2996	11084
403	salicylaldehyde	3004	11180
404	styralyl acetate	2684	11419
404	"-terpineol	3045	11038
403	4-terpinenol	2248	-
407	terpinolene		
	1	3046	11735
408	terpinyl acetate	3047	11421
409	tetrahydrogeraniol	2391	11022
410	5,6,7,8-tetrahydroquinoxaline	3321	11832
411	theaspirane[1-oxasprio-(4,5)-2,6,10,10]-tetramethyl -6-decene	3774	-
412	2-trans-6-cis-dodecadienal	3637	11176
413	trans-2-heptenal	3165	11154
414	trans-2-hexenoic acid	3169	11334
415	trans-2-nonen-1-o1	3379	11020
416	trans,4-trans-decadienal	3135	11170
417	trans,trans,2,4-hexadienal	3429	11151
418	trans-2-trans-4-nonadienal	3212	-
419	triacetin	2007	11429
420	2-tridecanone	3338	11250
421	triethyl citrate	3083	11541
422	2,6,6-trimethylcyclohex-2-ene-1,4-dione	3421	-
423	2,4,5-trimethylthiazole	3325	11823
424	2,4,5-trimethyl-(d)-3-oxazoline	3525	11833
425	2,4-undecadienal	3422	11173
426	*-undecalactone	3092	11713
427	undecanal	3092	11171
428	2-undecanone	3093	11249
429	9-undecenal	3094	A3012T
430	10-undecenal	3095	A3013T
431	undecyl alcohol	3097	11023
432	valeraldehyde	3098	11139
433	(-valerolactone	3103	11701
434	vanillin	3107	11188

A3 Variety of Flavourings Tentatively Permitted for Use - 163 kinds

List of The Flavourings Tentatively Permitted For Use

GAIN Report #CH9010 Page 85 of 177

Series No.	English Name	FEMA	Chinese
	-	Numbering	Coding
1	acetaldehyde	2003	11131
2	3-acetyl-2,5-dimethylfuran	3391	A3062T
3	3-acetyl-2,5-dimethylthiophene	3527	A3073T
4	2-acetyl pyrrole	3202	11831
5	ally acetic acid	2843	-
6	allyl cyclohexane acetate	2023	A3030T
7	ally cyclohexane butyrate	2024	A3038T
8	ally 3-cyclohexyl propionate	2026	A3034T
9	ally hexanoate	2032	-
10	ally heptanoate(ally enanthate)	2031	A3045T
11	allyl isothiocyanate	2034	A3060T
12	ally phenyl acetate	2039	A3050T
13	ally propionate	2040	A3033T
14	<i>p</i> -ansaldehyde	2670	11179
15	basil oil, sweet(eugenol rich)	2119	N004
16	benzaldehydes	2127	11181
17	benzaldehydes propylene glycol acetate	2130	A3007T
18	benzyl alcohol	2137	11034
19	benzyl acetate	2135	11410
20	benzyl dimethyl carbinyl acetate	2392	A3020T
21	benzyl tiglate	3330	11525
22	birch tar oil	2154	N125T
23	broad bean flower tincture	-	N126T
24	butyl phenyl acetate	2209	A3051T
25	butyl salicylate	3650	A3058T
26	cinnamic alcohol	2294	11043
27	cinnamon bark oil (ceylon)	2291	N116
28	cinnamon leaf oil (ceylon)	2292	N117
29	cinnamyl isobutyrate	2297	A3041T
30	cis-3-hexenyl butyrate-	3402	11459
31	cis-3-hexenyl hexanoate	3403	11495
32	cis-3-hexenyl propionate	-	-
33	<i>cis</i> -jasmone	3196	11256
34	cis-6-nonen-1-o1	3465	11019
35	cyclamen aldehyde	2743	A3016T
36	cocoa husk tincture	-	N024T
37	*-damascone	3622	11260
38	decyl aldehyde	2362	11168
39	diacetyl	2370	11235

GAIN Report #CH9010 Page 86 of 177

Series No.	English Name	FEMA	Chinese
40	P. d. 11 P	Numbering	Coding
40	diethyl butanedioate	2733	11446
41	difurfuryl sulfide	3238	11792
42	difurfuryl disulfide	3146	11798
43	dihydro-\$-ionone	3626	A3026T
44	dihydro-2-methyl-3(2h)-furanone	3373	-
45	2,4-dimethyl-5-acetylthiazol	3267	A3070T
46	dimethyl benzylcarbiny butyrate	2394	A3037T
47	4,5-dimethyl-3-hydroxy-2,5-dihydrofuran-2-one	3624	11269
48	4,5-dimethyl-2-isobutyl-3-thiazoline	3621	A3071T
49	2,3-dimethyl pyazine	3271	11806
50	diphenyl ether	3667	11080
51	2-ethoxythiazone	3340	A3069T
52	ethyl cinnamate	2430	11527
53	ethyl Bcis-4-octenoate	3344	11502
54	ethyl ester of coconut oil mixed acid		11540
55	ethyl 3(2-furyl)-propanoate	2435	A3032T
56	2-ethyl-4-hydroxy-5-methyl-3-(2h)-furanon	3623	11268
57	ethyl-2-methylpentanoate	3488	11476
58	ethyl-2-methyl-3-pentenoate	3456	11478
59	ethyl-3-methyl-phenylglycidase (strawberry aldehyde)	2444	A3014
60	ethyl nitrite	2446	A3059T
61	ethyl phenyl acetate	2452	11521
62	ethyle 4-phenylbutyrate	2453	A3055T
63	ethyl salicylate	2458	11534
64	ethyl trans-2-cis-4-decadoenoate	3148	11510
65	ethyl trans-2-hexenoate	3675	11490
66	ethyl vanillin	2464	A3015
67	furfuryl thiopropionate	3347	A3036T
68	gardenia flower extract	-	N091T
69	guaiac wood oil	2534	N144T
70	guaiacol	2532	1114
71	heptylaldehyde	2540	11152
72	hexanal	2557	11146
73	hexyl 2-butenoate	3354	A3039T
74	hexyl isobutyrate	3172	-
75	hexyl 2-methyl butyrate	3499	11458
76	\$-homocyclocitral(2,6,6-trimethyl-cyclohexell-1-	3474	A3018T
77	5-hydroxyethyl-4-methylthiazole	3204	11822
78	"-ionone	2549	11262

GAIN Report #CH9010 Page 87 of 177

Series No.	English Name	FEMA	Chinese	
		Numbering	Coding	
79	\$-ionone	2595	11263	
80	2-isobutyl-3-methyl pyrazine	3133	11811	
81	isoeugenol	2468	11102	
82	isopropyl alcohol	2929	11003	
83	2-isopropyl-5-methyl-2-hexenal	3406	11150	
84	laurice aldehyde	2516	11174	
85	lemon oil, terpeneless	2626	N087	
86	lemon oil, terpene	-	N088	
87	lemon oil terpene	-	N035	
88	linalcol	2635	11030	
89	linalyl acetate	2636	11426	
90	linal formate	2642	11390	
91	maltyl isobutyrate	3462	A3042T	
92	2-mercaptopropionic acid	3180	A3027T	
93	2-methoxy-3-propylpyra-zine	3358	A3064T	
94	4-(p-methoxyphenyl)-2-butane-one	2672	11233	
95	2-methoxy-3-sec-butyl-pyrazine	3433	11812	
96	methyl anthranilate	2682	11519	
97	"-methyl bezyl alcohol	2685	11033	
98	2-methyl-1-butanethiol	3303	11784	
99	4-methyl-5-(2-acetoxyethyl)-thiazole	3205	11821	
100	methyl cinnamate	2698	11528	
101	methyl dihydrojasmonate	3408	11539	
102	2-methyl-3-ethoxy pyrazine	3569	11810	
103	2-methyl-3-furfurylthio-pyrazine	3189	A3065T	
104	methyl heptine carbonate	2729	A3046T	
105	"-methyl-\$-hydroxypropyl-"'-methyl-\$'-	3509	A3004T	
	mercaptopropyl sulfideb			
106	"-methyl ionone	2711	A3023	
107	\$-methyl ionone	2712	A3023	
108	*-methyl ionone	2713	A3023	
109	2-methyl-3-methoxpyrazine	3280	A3066T	
110	2-methyl-3-methylthiopyrazine	3208	11809	
111	2-methyl-3-furanthiol	3188	A3061T	
112	2-methyl-5-methylthio-furyl	3366	-	
113	3-methylpaentanoic acid	3437	11348	
114	2-methyl-4-pentenoic acid	3511	A3028T	
115	methyl phenethyl ether	3198	11083	
116	methyl-4-phenylbutyrate	2739	A3054T	

GAIN Report #CH9010 Page 88 of 177

Series No.	English Name	FEMA	Chinese
117	5 mathyd 2 mhanyd 2 hayanal	Numbering 3199	Coding 11149
117	5-methyl-2-phenyl-2-hexenal methyl salicylate	2745	11149
	i		
119	3-(methylthio)butanal	3374 3376	A3009T
120 121	1-(methylthio)-4-methyl-2-pentanone  o-(methylthio)-phenol	3210	A3020T 11794
122	3-(methylthio)propanol	3415	11782
123	methyl trans-2-hexeoate	2709	11486
124	4-methyl-5-vinythiazole	3313	11825
125	(-nonalactone	2781	11705
126	2-6-npnadienal diethyl acetal	3378	A3011T
127	nonanai(nonyl-aldehyde)	2782	11161
128	nutmeg oil	2793	N037
129	nutmeg tincture	-	N038
130	1-octen-3-one	3515	11247
131	octyl aldehyde	2797	11157
132	onion oil	2817	N074
133	peach aldehyde (g-undecalactone)	3091	11173
134	1-penten-3-one	3382	11237
135	perillaldehyde	3557	11194
136	phenethyl butyrate	2861	11466
137	phenehylisovalerate	2871	11483
138	phenethyl octanoate	3222	11506
139	phenol	3223	11109
140	phenylacetaldehyde	2874	11184
141	4-phenyl-3-buten-2-one	2881	11234
142	phenyl ethyl cinnamate	2863	11531
143	phenyl propyl alcohol	2885	11036
144	phenylethyl acetate	2857	11411
145	pinanyl mercaptan	3503	A3003T
146	piperonal	2911	11191
147	propenylguaethol (vanitrope)	2922	11116
148	rhodinyl acetate	2981	A3031T
149	rose oxie	3236	11802
150	styralyl butyrate	2686	A3041T
151	sweet orange oil terpene	-	N133
152	tetrahydrofurfuryl acetate	3055	11425
153	thiogeraniol	3472	A3002T
154	thymol	3066	11107
155	trans-2- <i>cis</i> -6-nonadienal	3377	11166

GAIN Report #CH9010 Page 89 of 177

Series No.	English Name	FEMA Numbering	Chinese Coding
156	trans,trans-2,4-octadienal	3721	11159
157	trans,trans-6,2-octadienal	3466	11160
158	trimethyl amine	3241	11801
159	2,3,5-trimethyl pyrazine	3244	11808
160	2-undecenal	3423	11172
161	valencene	3443	11732
162	d1-valine	3444	-
163	valeraldehyde	3098	11139

# Annex B (Normal Annex)

Newly Added Nutrition Enhancer

List B1 Field of Application and Quantity of Application

Category	Name of Food Additives	Field of Application	Maximum Level g/kg	Remarks
Nutrition Enhancer	Sulfaminic-ethyl Acid (Taurine)	Oral liquid for children	4.0~8.0	
	Axerophthol	Solid beverage bases	4~8 mg/kg	
	(Vitamin A)	Ice cream	0.6~1.2 mg/kg	
	Beta-carotene	Solid beverage bases	3~5 mg/kg	
		Fortified beta-carotene drink	20~40 mg/kg	
	Vitamin B <sub>2</sub> (Riboflavin)	Solid beverage bases	0.01~0.013	Fortified nutrition salt is limited to regions with riboflavin deficiency.
	Vitamin B <sub>2</sub>	Solid beverage bases	0.007~0.01	
	Vitamin D	Solid beverage bases, ice cream	10~20 Fg/kg	
	Tocopherol (Vitamin E)	Fortified tocopherol drinks	20~40 mg/l	
	Active Calcium	Salt, meat floss	5~10	
	Sodium Selenite	Biscuits	240 Fg/kg	
	Sodium Selenate	Flower tea	1.0	

GAIN Report #CH9010 Page 90 of 177

Category	Name of Food Additives	Field of Application	Maximum Level g/kg	Remarks
Nutrition Enhancer	Sodium Fluoride	Salt	0.1	In region of fluorine deficiency, use sodium fluoride under directives of the local Health Department.
	Chlorinated Hematosin	Biscuits, candy	0.04	
		Fortified ferric drink	0.1	
	Zinc Lactate	Oral liquid for children	0.6~1.0	
	Zinc Glycine	Fortified zinc drink, cereals and cereal products	10~20 mg/kg	Zinc content in Zinc Glycine is
		Dairy product	30~60 mg/kg	31.8%.
		Infant formula foods	25~70 mg/kg	7
	Magnesium Sulfate	Mineral drinks	0.050	
	Magnesium Gluconate (Enzyme Process )	Dairy products	300~700 mg/kg (measure Mg)	Magnesium element content
		Infant formula foods	5.56~13 g/kg (measure Magnesium Gluconate)	in Magnesium Gluconate is 5.39%.
	Copper Gluconate	Dairy products	5.7~7.5 mg/kg	Magnesium element content
		Infant formula foods	7.5~10 mg/kg	in Copper Gluconate is 11.68 %.
	Manganese Gluconate (Enzyme Process)	Dairy products	1.08~4.32 mg/kg	Manganese element content
		Infant formula foods	1.32~5.26 mg/kg	in Manganese Gluconate is 11.42 %.
	Potassium Gluconate	Fortified potassium drink	0.05~0.2	
	(Enzyme Process)	Dairy products	0.2~0.8	1
	(-Linolenic Acid	Mixing oil, milk and dairy products, fortified (-linolenic acid drinks	2%~5%	

GAIN Report #CH9010 Page 91 of 177

# **Annex C (Standard Annex)**

# List of Gum-based Substances and Ingredients in Chewing Gum

The gum-based substances and their mixing ingredients in chewing gums should be prepared from the substances which comply with the substances listed below. Each ingredient should be used in the amount specified in BG 2760 "Hygienic Standard for Uses of Food Additives", otherwise it should be used in appropriate dose level as required in the production.

#### C1 Natural Gums

Sugar gum of tree

Chiquibul

Massararanduha

**Jelutong** 

Lechecaps

Natural gum (solid latex)

# C2 Synthetic Rubber

Butadiene styrene rubber (75% butadiene, 25% styrene rubber, 50% butadiene, 50, styrene rubber)

Butyl rubber (ethyl butylene-isopentadiene copolymer)

Polyethylene

Polyisobutene

Polybutene

Polyvinyl acetate

Ethylene of acetic acid-lauric acid-ethylene copolymers

## C3 Resin

Glyceride of resin

Glycerid of wood resin

Polymerized glycerin of resin

Partly dipolymerized glyceride of resin

Partly hydrogenated glyceride of resin

Glyceride of tholresin

Partly hydrogenated methyl abietate

Partly hydrogenated pentaerythritol ester of wood resin

Pentaerythritol ester of wood resin

Synthetic resin (terpene resin)

#### C4 Waxes

Bees (vellow waxes)

Waxes of little wax tree)

Wax of Brazil palm

Microcrystalline paraffin wax

Petroleum paraffin wax, synthetic

Paraffin

GAIN Report #CH9010 Page 92 of 177

# C5 Emulsifiers (softening agent, gelling agent)

Monoglyceride acetate

Trigglyceride acetate

Stearic acid, calcium stearate, magnesium stearate, sodium stearate, potassium stearate, sucrose fatty acid ester

Mono-, di-tri-glyceride of fatty acid

Lecithin

Defatted coca powder

Alginic acid, sodium alginate, ammonium alginate

Gelatin

Pectin

Glycerin

Propanediol

## C6 Antioxidant, Preservative

*Tert*-butyl-4-hydroxy anisole (butyl-hydroxyl anisole BHA)

2,6,di-*tert*-butyl *p*-cresol (di-butyl hydroxyl toluene BHT)

Propyl gallate PG

Tocopherol

Potassium sorbate

Sodium benzoate

# C7 Filling Agent

Calcium carbonate

Magnesium carbonate

Talcum power

Dicalcium hydrophosphate

#### Annex D

# List of Processing Assistants Recommended for Use in Food Industry

#### D1 Definition

Processing assistants used in the food industry are the variety of auxiliary substances in order to perfect the processing of food. The auxiliary substances are not directly related to food itself, but they assist in filtering, clearing, absorbing, lubricating, facilitating to take out from the machine, decoloring, peeling, extracting solvent, nutritious substance of fermentation etc. Normally, such assistants should be removed before finishing products. For some food, the residue level is set. These assistants should be considered as food-grade.

# D2 List of processing assistants recommended for use food machine

- 1. Iron oxide
- 2. Sulfur
- 3. Silica gel
- 4. Iron powder
- 5. Calcium oxide

GAIN Report #CH9010 Page 93 of 177

- 6. Calcium hydroxide
- 7. Calcium chloride (anhydrous)
- 8. Active carbon
- 9. Active white clay
- 10. Ferrous phosphate
- 11. Sodium carbonate anhydrous
- 12. Acetone
- 13. 1,2-dichloromethane
- 14. Ethanol
- 15. Ethane
- 16. Petroleum ether
- 17. Ethyl acetate
- 18. Diethyl ether
- 19. Propanol-1
- 20. Butanol-1
- 21. Propanediol-1, 2
- 22. Methanol
- 23. Light petrol No.6
- 24. Activated carbon of plant
- 25. Cellulose
- 26. Ion exchange resin
- 27. Silicon dioxide
- 28. Solidified tannin
- 29. Edible tannin
- 30. Formaldehyde
- 31.905
- 32. Palladium
- 33. Nickel
- 34. Silver
- 35. Ammonium sulfide
- 36. Ammonium chloride
- 37. Ammonium sulfite
- 38. Ammonia liquor
- 39. Bentonite
- 40. Kaolin
- 41. Siliceous earth
- 42. Pearl rock
- 43. Afpulgito clay
- 44. Polyacrylamide
- 45. Mineral oil
- 46. Polyglycerolpolylinoleate
- 47. Magnesium trisilicate
- 48. Magnesium carbonate
- 49. Magnesium oxide

GAIN Report #CH9010 Page 94 of 177

- 50. Calcium aluminium silicate
- 51. Talcum powder
- 52. Paraffin
- 53. Vaseline
- 54. Hydrogen air
- 55. Nitrogen air
- 56. Carbon dioxide
- 57. Sodium laurysulfonate
- 58. Sodium hypochlorite
- 59. Sodium dichloroacetonitrleurate
- 60. Triethanolamine
- 61. Sodium hydroxide
- 62. Trisodium phosphate
- 65. Monoethanolamine
- 66. Disodium EDTA
- 67. Dodecylbenzene sulfonic acid sodium salt
- 68. Chlorine dioxide
- 69. Sodium carbonate
- 70. Trisodium chlorinated phosphate
- 71. Fatty alcohol amide
- 72. Sodium sulfate lipase
- 73. Nitric acid
- 74. Sodium sulfate
- 75. Calcium carbonate
- 76. Calcium phosphate
- 77. Zinc phosphate
- 78. Potassium dihydrogen phosphate
- 79. Ammonium phosphate
- 80. Potassium chloride
- 81. Potassium bicarbonate
- 82. Vitamin B group
- 83. Urea
- 84. Magnesium sulfate
- 85. Disodium hydrogen phosphate
- 86. Sodium dihydrogen phosphate
- 87. Calcium chloride
- 88. Hexanedioic acid anhydride
- 89. Propanetriol (glycerol)
- 90. Hexanedioic acid
- 91. Peracetic acid
- 92. Potassium hydroxide
- 93. Succinic acid anhydride
- 94. Sodium sulfate
- 95. Sodium acetate

GAIN Report #CH9010 Page 95 of 177

- 96. Hydrogen peroxide
- 97. Hydrochloric acid
- 98. Phosphoric acid
- 99. Sodium hydrogen carbonate
- 100. Potassium carbonate
- 101. 6-benzylaminopurine

# Annex E

Updated and Expanded List of Food Additives Permitted for Use

Category	Name	Field of Application	Maximum Level g/kg	Registered by Company
Acidity Regulator	Atopic Acid	Chewing gum	4	Wrigley Chewing Gum Co., Ltd., Guangzhou, PRC
Regulator	Fumaric Acid		8	Ltd., Guargznou, 1 KC
Anti-sticking	Micro crystal-line	All foods	Appropriate level as	FMC Co., Ltd., Guangzhou
Agent	Cellulose		required in	Office
	Tricalcium	Compound	production	
	Carbonate	condiments		
	Magnesium	Candy	15	Ferrero Asia Co., Ltd.
	Stearate			
Anti-foaming	Emulsifying	Drinks	10 mg/l	Coca-Cola China Co., Ltd.
Agent	Silicone Oil	processing		
		aid		
Antioxidant	BHA	Candy flavoring	0.1	Ferrero Asia Co.,Ltd
		essence		
	Sodium	Candy flavoring	0.1	
	Absorbate	essence		
	Sodium Ascorrate	Candy	1.5	
	VE (dl-"-	Edible fat and oil	0.20	Roche (China) Co., Ltd.
	tocopherol			
Bleaching	Sodium Sulfite	Fruit drink thick	0.25	Xindebao Food Co.,Ltd.
Agent		syrup	(calculated by	
			$Na_2SO_3$	
			Residue level in	
			drinks diluted to 10	
			times:	
			15 mg/l (measure	
			$SO_2$ )	

GAIN Report #CH9010 Page 96 of 177

Category	Name	Field of Application	Maximum Level g/kg	Registered by Company
Bleaching Agent	Sodium (Potassium) Pyrosulfate Sodium Bisulfite	Fresh grapes (after table gasification process. Measure sulfuric acid salt)	2.4 (residue level by SO <sub>2</sub> #0.05)	On package in tablets it is marked: "Unfit for human consumption". Tianjin Forestry and Fruit Tree Institute
Coloring Agent	Titanium Dioxide	Turbid agent for non carbonated drinks	10 g/l	Shuzhou FAY Company
	Brilliant Blue	Extrusion foods, fried foods Special flavor	0.025	Shanghai Pepsi Food Co., Ltd.  Nestle Investment Service Co.,
	Monocus Red, Red Konica Rice Red	milk drink Special flavor milk drink	Appropriate level as in required in production	Ltd.
	Sunset Yellow, Sunset Yellow Alum Lake	Extrusion foods, fried foods	0.05	Shanghai Pepsi Food Co.,Ltd
	Indigotine, Indigotine Alum Lake	Extrusion foods, fried foods	0.05	
	Erythrosine 4R Aluminum Lake	Extrusion foods, fried foods	0.025	
Emulsifier	Sucrose Fatty	Drinks	1.5	Nestle Investment Service Co.,
	Acid Ester	Candy (including chocolate and chocolate products)	10	Ltd.
	Acetyzed Monoglycerol Ester	Deep fried potato chips	2.0	Peg (China) Co., Ltd.
	Propanediol Fatty Ester	Deep fried potato Chip	2.0	Peg (China) Co., Ltd.

GAIN Report #CH9010 Page 97 of 177

Category	Name	Field of Application	Maximum Level g/kg	Registered by Company
Flavor Enhancer	Ribonnucleotide (5'-Mono- phosphorus, 5'- mono-guanosine etc)	Baby formula milk powder	0.2~0.58	Intel Nutritious Milk Products Co., Ltd. US Wyeth Pharmaceuticals (China) Co., Ltd.
Preservative	Sorbic Acid (Potassium Sorbate)	Milk drink	0.5	Hangzhou Wahaha Company
Coating Agent	Brazil Carnauba Wax	Bonbon	0.6	Ferrero Asia Co., Ltd
Nutrition Enhancer	Ascorbic Acid	Candy	1.5	In candy flavoring Ferrero Asia Co., Ltd
	Calcium Acetate	Vinegar	6~8 (calculated by Ca)	Tianjin Daerkang High-Calcium Vinegar Plant
	Calcium Chloride Calcium Carbonate Calcium Lactate Calcium Citrate Calcium Gluconate	Soft drinks	0.44~1.3 0.4~1.2 1.2~3.7 0.76~2.30	Coca-Cola China Co., Ltd.
	Vitamin B <sub>6</sub> Vitamin B <sub>12</sub> Niacin (Nicotinamide)	Soft drinks	0.4~1.2 m/kg 0.6~1.8 mg/kg 3.3~10 mg/kg	Coca-Cola China Co., Ltd.
	Zincates	Infant milk powder for babies over 1 year old	0.050~0.175 (measure Zn)	Nestle Investment Service Co., Ltd.
Sweetener	Potassium Acetyl Sulohanilamide	Flavored yoghurt Condiments Sugarless (low sugar candy, sugarless (low sugar) chewing gum	0.35 0.5 2.0	Shanghai Nawei Nutrition Agent and Food Additives Co., Ltd.

GAIN Report #CH9010 Page 98 of 177

Category	Name	Field of Application	Maximum Level g/kg	Registered by Company
Thickener	Deacetylated Chitine	Meat sausage (square ham, round ham)	6	Jinan Haidebei Marine Bio-Products Co.,Ltd

GAIN Report #CH9010 Page 99 of 177

#### IV. PESTICIDES AND OTHER CONTAMINANTS

China's standards for pesticide residues are generally simpler and less specific those of the United States. China regulates only sixty-two pesticides and Chinese regulations tend to be much less specific than U.S. pesticide standards. For example, Chinese tolerances for specific chemicals usually apply to broad classes of products such as "fruits" and "unprocessed grain," rather than specifying different tolerances for different kinds of fruits and grains.

Standards for pesticide residues are proposed by the Ministry of Public Health, and then evaluated and approved by the State Bureau of Technical Supervision. Imported and exported products are inspected by provincial or local offices under the supervision of the State Administration for Entry-Exit Inspection and Quarantine to make sure that they meet Chinese standards.

Under China's Commodity Inspection Law, buyers and sellers are free to enter into private contracts specifying tolerances for chemicals which are not regulated by the government. If private contracts include clauses specifying tolerances for chemicals which are not regulated by the government, domestic products are inspected by provincial or local offices under the supervision of the State Bureau of Technical Supervision.

China's standards for specific pesticides are listed in a book called <u>The Comprehensive Compilation of National Maximum Residue Limits for the World's Pesticides and Veterinary Drugs in Foodstuffs and Feedstuffs</u>. It was compiled by the State Administration for Entry-Exit Inspection and Quarantine (then known as the State Administration for the Inspection of Import & Export Commodities), and published by China Foreign Trade and Economic Press in 1995.

There has not been an updated version published since 1995. The book contains regulations and standards for maximum residue levels for pesticides and veterinary drugs in foodstuffs and feedstuffs not only in China, but also in other countries. It also contains regulations and standards for key industrial crops, such as tobacco and tea. These standards apply to domestic, imported and exported products. Pesticide names are in both English or Latin, and Chinese, but the names of commodities are in Chinese only.

#### **Chinese Tolerances for Pesticide Residues**

Name of Pesticide	Maximum Residue Limit mg/kg	Commodities
1, 2-Dibromoethane	0.01	Unprocessed grain
2, 4-D	0.2 0.5	Vegetables Unprocessed grain
Acephate	0.2 0.5	Unprocessed grain, vegetables Fruits
Aldicarb	zero 0.05	Cotton seed oil, peanut oil Shelled peanuts

GAIN Report #CH9010 Page 100 of 177

Name of Pesticide	Maximum Residue Limit mg/kg	Commodities
Aldrin	0.02	Unprocessed grain
Anilazine	0.2 10	Unprocessed grain Vegetables
Arsenical	0.7	Unprocessed grain
B.C.	0.1 0.2 0.3 0.4 1.0 2 4.0	Cow's milk, dairy products Vegetables, fruits Processed grain Meat with fat content under 10% green tea, black tea Eggs (no shell), egg products Fish Meat with fat content above 10%
Buprofezin	0.3	Processed grain, vegetables
Captan	15	Fruits
Carbaryl	0.5 1.0 2.0 2.5 5.0	Edible oil Tobacco Vegetables Fruits Unprocessed grain
Carbendazim	0.5	Unprocessed grain, vegetables, fruits
Carbofuran	0.5	Unprocessed rice
Carbon disulfide	10	Unprocessed grain
Chlormequat	5	Unprocessed grain
Chloropicrin	2	Unprocessed grain
Chlorothalonil	0.2 1.0	Unprocessed grain Vegetables, fruits
Chlorpyrifos-Methyl	5	Unprocessed grain
Cl(CONH) <sub>2</sub> Cl	3	Unprocessed grain, vegetables
Clofentezine	1	Fruits
Cyanide	5	Unprocessed grain

GAIN Report #CH9010 Page 101 of 177

Name of Pesticide	Maximum Residue Limit mg/kg	Commodities
DDT	0.1 0.2 1.0 2.0	Cow's milk, dairy products, vegetables, fruits Processed grain, green tea, black tea, meat with fat content under 10% Fish, eggs(no shell), egg products Meat with fat content above 10%
Deltamethrin	0.05 0.1 0.2 0.5	Citrus Fruits with edible peels Fruits, including true fruits such as tomatoes Leafy vegetables, unprocessed grain
Diazinon	0.1 0.5	Unprocessed grain Vegetables, fruits
Dichlorvos	zero 0.1 0.2	Vegetable oil Unprocessed grain Vegetables
Dieldrin	0.02	Unprocessed grain
Dimehypo	0.2	Rice
Dimethoate	zero 0.05 1.0	Vegetable oil Unprocessed grain Vegetables
Ethion	0.2 0.5	Unprocessed grain Cotton seed oil
Ethoprophos	0.02	Peanuts
Fenitrothion	zero 0.5 5	Vegetable oil Vegetables, fruits Unprocessed grain
Fenthion	0.01 0.05	Vegetable oil Unprocessed grain Vegetables, fruits
Fenvalerate	0.05 0.2 0.5	Root vegetables Fruits, including true fruits such as tomatoes, unprocessed grain Leafy vegetables

GAIN Report #CH9010 Page 102 of 177

Name of Pesticide	Maximum Residue Limit mg/kg	Commodities
Flucythrinate	0.2 0.5	Unprocessed grain, vegetables, cotton seed oil Fruits
Glyphosate	0.1 2.0	Fruits Sugarcane
Heptachlor	0.02	Unprocessed grain
Isocarbophos	0.02 0.10	Citrus meat Unprocessed rice
Malathion	zero 3	Vegetables, vegetable oil Unprocessed grain
Mercury	0.02	Processed grain
Methamidophos	zero 0.1	Vegetables, fruits Unprocessed rice
Methyl bromine	50 (calculated as inorganic bromine)	Unprocessed grain
Parathion	zero 0.1	Vegetables Unprocessed grain, vegetable oil
Parathion-Methyl	0.1	Unprocessed rice, cotton seed oil
Permethrin	1.0 2.0	Unprocessed grain, vegetables Fruits
Phorate	zero 0.02	Vegetables, fruits, vegetable oil Unprocessed grain
Phosmet	0.5	Unprocessed grain, vegetables, fruits, tea
Phosphamidon	0.1	Unprocessed grain
Phosphide	0.05	Unprocessed grain
Phoxim	0.05	Unprocessed grain, vegetables, fruits
Pirimicarb	0.05 0.50 1	Unprocessed grain Fruits Vegetables
Pirimiphos-Methyl	5	Unprocessed grain

<u>GAIN Report #CH9010</u> Page 103 of 177

Name of Pesticide	Maximum Residue Limit mg/kg	Commodities
Polychlorinated biphenyls (PCBs)	0.2	Saltwater fish, shellfish, shrimp, algae based foods
Propiconazole	0.1	Unprocessed grain
Quinalphos	0.2 0.5	Rice, vegetables Citrus
Quintozene	0.1 0.2	Unprocessed grain Vegetables
Sebufos	0.005	Citrus, sugarcane
Thiocyclam	0.2	Rice
Triadimefon	0.2 0.5	Vegetables, fruits Unprocessed grain
Triadimenol	0.1	Unprocessed grain
Trichlorphon	0.1 0.2	Unprocessed grain Vegetables, fruits
Tricyclazole	2.0	Unprocessed rice
Vinclozolin	5	Vegetables

#### ADDITIONAL REFERENCE:

- ! Standards for Safety Application of Pesticides (GB 4285-1989)
- ! Guidelines for Safety Application of Pesticides (I) (GB 8321.1-1987)
- ! Guidelines for Safety Application of Pesticides (II) (GB 8321.2-1987)
- ! Guidelines for Safety Application of Pesticides (III) (GB 8321.3-1989)
- ! Guidelines for Safety Application of Pesticides (IV) (GB 8321.4-1993)
- ! Toxicological Test Methods of Pesticides for Registration (GB 15670-1995)

Source: Catalogue of National Standards and Information Compilation of the People's Republic of China (1996)

GAIN Report #CH9010 Page 104 of 177

# V. OTHER REGULATIONS AND REQUIREMENTS

## A. CHINA LAW ON THE ENTRY AND EXIT ANIMAL AND PLANT QUARANTINE

All imported animal and plant products are subject to quarantine inspection by Chinese customs. The inspection is based on the Law of the People's Republic of China on the Entry and Exit, Animal and Plant Quarantine. Please see annex ANX V.1 of this report for an English translation of the law. In addition to that, there are Regulations for the Implementation of the Law of the People's Republic of China on the Entry and Exit, Animal and Plant Quarantine. However, the law and the regulations are basically general guidelines. Unlike in the United States, China has no codes nor standards for specific products.

Prior to China's governmental reforms of 1998, China's Animal and Plant Quarantine (CAPQ) Bureau was a part of the Ministry of Agriculture. Two other inspection bureaus were also involved with inspection of many food products: China Commodity Inspection Bureau checked products for quality, weight, and quantity, while the Health Inspection Bureau tested for pesticides, antibiotics, residues, and any other visible and non-visible problems. This system was cumbersome and required all three inspection services to be present throughout the country at each port. Fortunately, the reforms of 1998 have led to the merger of the three inspection services into one new organization called the State Administration of Entry and Exit for Inspection and Quarantine of the People's Republic of China which is now under China Customs. The new organization is commonly abbreviated as SAIQ and/or CIQ, and only time will tell which English-language abbreviation will win out in the long run.

CIQ's reorganization is currently complete in Beijing but is not yet finalized at the provincial and local government levels. Each locality is waiting for instructions from Beijing about which of the former three bureau's directors will remain in charge of the new organization in each locality, along with decisions about all the other positions at each locality. During a June 1999 conference on meat safety and inspection held in Xiamen, we met many provincial and city officials from CIQ, but most of them did not have current name cards as they awaited their future position assignments in the new organization. We expect this merger to be complete by December 1999 in each provincial and local office.

Once the products have been inspected and cleared, then products are subject to import tariffs based on the CIF (cost, insurance, and freight) price. For example, imported live birds are subject to a 12-percent tariff while a 20-percent tariff is applied to fresh, chilled, and frozen poultry. In addition to the import tariff, there is also a value-added tax (VAT) calculated on the total value of the product, which is the CIF price plus the applicable import duty. The VAT for unprocessed products is 13 percent and for processed products is 17 percent.

For much of the past decade, the United States has been actively engaged in bilateral phytosanitary talks with China on the importation of U.S. agricultural products. So far, many protocols have been signed on following products:

Animal Products: Horses, Breeding Poultry and Hatching Eggs, Animals & Animal Genetic Material, Bovine Embryos, Bovine Semen, Cattle, Swine Semen, Swine, Ratites, and Ratite Hatching Eggs.

Plant Products: Apples, Cherries, and Table Grapes.

The latest progress was made in April 1999 when the Agreement on U.S.-China Agricultural Cooperation was signed during China's Premier Zhu Rong Ji visited America. According to the agreement, China will lift the ban on the export of citrus from Arizona, California, Florida, and Texas. China has also agreed to recognize the U.S. certification system

GAIN Report #CH9010 Page 105 of 177

for meat and poultry, allowing access to all segments of the Chinese market. In signing the agreement, China acknowledged that TCK smut does not pose a risk to China's domestic wheat production, and will allow the import of U.S. wheat and other grain that is at or below a specific tolerance for TCK (43,000 spores per 50 grams). The implementation of this agreement is still under way as the Chinese government must change many of its entry and inspection procedures to reflect the agreement.

For specific quarantine problems, please contact USDA's Animal and Plant Health Quarantine Service (USDA/APHIS) office in Beijing:

Mr. Dale Maki, APHIS Attache

Tel: 86-10-6505-4575 Fax: 86-10-6505-4574

**Note:** For the complete text of the Law of the People's Republic of China on the Entry and Exit Animal and Plant Quarantine, please see annex ANX V.1 below.

# ANX V.1 LAW OF THE PEOPLE'S REPUBLIC OF CHINA ON THE ENTRY AND EXIT ANIMAL AND PLANT QUARANTINE

Adopted at the 22<sup>nd</sup> Meeting of the Standing Committee of the Seventh National People's Congress on October 30, 1991, promulgated by Order No.53 of the President of the People's Republic of China on October 30, 1991 and effective as of April 1, 1992

#### **CHAPTER 1: General Provisions**

- **Article 1** This Law is formulated for the purpose of preventing infectious or parasitic diseases of animals, and diseases, insect pests and weeds dangerous to plants, as well as other harmful organisms (hereinafter referred to, for short, as diseases, insect pests and harmful organisms) from spreading into or out of the country, protecting the production of agriculture, forestry, animal husbandry and fishery as well as human health, and promoting the development of foreign economic relations and trade.
- Article 2 Animals and plants, their products and other quarantine objects, containers and packaging materials used for carrying animals and plants, their products or other quarantine objects, as well as means of transport from animal or plant epidemic areas shall, on entry of exit, be subject to quarantine inspection in accordance with this Law.
- Article 3 An animal and plant quarantine department shall be instituted under the State Council (hereinafter referred to, for short, as the state animal and plant quarantine department), which shall conduct a unified administration of the entry and exit animal and plant quarantine in the whole country. Port animal and plant quarantine offices set up by the state animal and plant quarantine department at ports open to the outside world and at places busy with entry and exit animal and plant quarantine shall, in accordance with this Law, carry out entry and exit animal and plant quarantine.
- **Article 4** A port animal and plant quarantine office may exercise the following functions and powers when performing quarantine inspection:
  - (1) embarking on a ship, a vehicle or an airplane to perform quarantine under this Law;

GAIN Report #CH9010 Page 106 of 177

(2) entering a seaport, an airport, a railway or coach station, a post office or a site where quarantine objects are stored, processed, bred or cultivated to perform quarantine inspection and collect samples according to relevant provisions;

- (3) entering a site relating to production or storage according to the needs of quarantine, to carry out epidemic monitoring and investigations or quarantine supervision and control;
- (4) consulting, making copies of or excerpts from operational diaries, bills of lading, contracts, invoices or other documents relating to the quarantine objects.
- **Article 5** The state shall prohibit the following objects from entering the country:
- (1) pathogenic micro-organisms(including seed cultures of bacteria and viruses) of animals and plants, insect pests and other harmful organisms;
- (2) relevant animals and plants, their products and other quarantine objects from countries or regions with prevalent epidemic animal or plant diseases;
  - (3) animal carcasses; and
  - (4) soil

When a port animal and plant quarantine office discovers any objects prohibited from entering the country as prescribed in the preceding paragraph, such objects shall be returned or destroyed.

Whoever, because of special needs such as scientific research, imports any objects prohibited from entering the country as prescribed in the first paragraph of this Article, must submit an application in advance, which shall be subject to the approval by the state animal and plant quarantine department.

The catalogues of objects prohibited from entering the country as prescribed in (2) of the first paragraph of this Article shall be worked out and announced by the department of agriculture administration under the State Council.

**Article 6** In the event that a serious animal or plant epidemic occurs abroad and is liable to spread into the country, the State Council shall adopt emergent preventive measures and may, when necessary, issue orders to prohibit means of transport from animal or plant epidemic areas from entering the country or to blockade the relevant ports; the local people's governments in areas threatened by the animal or plant epidemic as well as the port animal and plant quarantine offices concerned shall immediately take emergency measures, and, at the same time, report to the people's governments at higher levels and the state animal and plant quarantine department.

The departments of posts and telecommunications as well as transportation shall give priority to transmitting or transporting reports concerning serious animal or plant epidemic or materials to be sent for quarantine inspection.

- Article 7 The state animal and plant quarantine department and port animal and plant quarantine department and port animal and plant quarantine offices shall practice a quarantine supervision system in relation to the procedures in the production, processing and storage of animals and plants and their products for entry or exit.
- **Article 8** When a port animal and plant quarantine office is carrying out its tasks of quarantine inspection in seaports, airports, railway or coach stations, or post offices, relevant departments such as the Customs, departments of communications, civil aviation, or railways, and postal services shall coordinate therewith.
- **Article 9** Any quarantine functionary of an animal and plant quarantine organ must be devoted to his or her duties and enforce the law impartially.

No unit or individual may obstruct a quarantine functionary of an animal and plant quarantine organ from carrying out his or her duties according to law.

GAIN Report #CH9010 Page 107 of 177

# **CHAPTER 2: Entry Quarantine**

**Article 10** Whoever imports animals, animal products, plant seeds, seedlings or other propagating materials must submit an application in advance and go through the formalities for examination and approval of quarantine inspection.

- Article 11 Whoever imports animals and plants, their products or other quarantine objects through trade, scientific and technological cooperation, exchanges, donations or aid shall specify in the contracts or agreements the requirements for quarantine inspection prescribed by China's law and the necessity of quarantine certificates issued by the animal and plant quarantine department under the government of the exporting country or region accompanied therewith.
- **Article 12** The owner or his or her agent shall apply to the port animal and plant quarantine office at the port of entry for quarantine inspection of the animals and plants, their products or other quarantine objects, before or on their entry, on the strength of documents such as the quarantine certificates issued by the exporting country or region and the trade contracts.
- **Article 13** On arrival at a port of a means of transport for carrying animals, the port animal and plant quarantine office shall for the prevention of epidemics adopt on-the-spot preventive measures and conduct disinfection of person embarking on or disembarking from the means of transport of having contacts with the animals, the means of transport for carrying the animals and the contaminated fields.
- **Article 14** Import animals and plants, their products and other quarantine objects shall be quarantine objects shall be quarantined at the port of entry; without consent of the port animal and plant quarantine office, the same shall not be unloaded from the means of transport.

The import animals and plants that need to be placed in isolation for quarantine inspection shall be quarantined in an isolation court designated by the port animal and plant quarantine office.

By reason of limited conditions at the port of entry, the state animal and plant quarantine department may decide to have the animals and plants, their products or other quarantine objects transported to a designated place for quarantine inspection. In the course of transportation, loading and unloading, the owner or his or her agent shall take preventive measures against epidemics. Designated places for storage, processing, isolated feeding or planting shall conform to the provisions on animal and plant quarantine and epidemic prevention.

**Article 15** The import animals and plants, their products or other quarantine objects that pass the quarantine inspection shall be allowed to enter the country; the Customs shall, after verification, release the same on the strength of the quarantine certificates issued or the stamps on the customs declaration forms affixed by the port animal and plant quarantine office.

In respect of the import animals and plants, their products or other quarantine objects that need to be transferred away from a customs surveillance zone for quarantine inspection, the Customs shall, after verification, release the same on the strength of the Quarantine Transference Notice issued by the port animal and plant quarantine office.

**Article 16** In respect of the import animals that fail in the quarantine inspection, the port animal and plant quarantine office shall issue the Quarantine Treatment Notice notifying the owner or his or her agent to deal with the said animals in either of the following manners:

GAIN Report #CH9010 Page 108 of 177

(1) the animals that are found suffering from Class A infectious or parasitic diseases, shall, together with all the other in-contact animals, be returned or slaughtered with their carcasses destroyed; or

(2) the animals that are found suffering from Class B infectious or parasitic diseases shall be returned or slaughtered; and the other in-contact animals shall be placed in an isolation camp or any other designated place for observation.

In respect of import animal products or other quarantine objects that fail in the quarantine inspection, the port animal and plant quarantine office shall issue the Quarantine Treatment Notice notifying the owner or his or her agent to conduct such treatments as disinfection and disinfestation, returning or destruction. The products or objects that have passed the quarantine inspection after a treatment by disinfection and disinfestation shall be allowed to enter the country.

- **Article 17** On discovering through quarantine inspection that import plants, plant products or other quarantine objects are contaminated with diseases, pests or weeds dangerous to plants, the port animal and plant quarantine office shall issue the Quarantine Treatment Notice notifying the owner or his or her agent to conduct such treatments as disinfection and disinfestation, returning or destruction. Those that have passed the quarantine inspection after a treatment by disinfection and disinfestation shall be allowed to enter the country.
- **Article 18** The catalogues of the Class A and Class B infectious or parasitic diseases of animals specified in Article 16, Paragraph 1, Item 1 and 2 of this Law and the catalogues of the diseases, pests or weeds dangerous to plants specified in Article 17 of this Law shall be worked out and announced by the department of agriculture administration under the State Council.
- **Article 19** On discovering through quarantine inspection that import animals and plants, their products or other quarantine objects are contaminated with diseases, insect pests or harmful organisms which are not covered by the catalogues specified in Article 18 of this Law but are extremely harmful to agriculture, forestry, animal husbandry and fishery, the port animal and plant quarantine office shall, in accordance with relevant regulations of the department of agriculture administration under the State Council, notify the owner or his or her agent to conduct such treatment as disinfection and disinfestation, returning or destruction. Those that have passed the quarantine inspection after a treatment by disinfection and disinfestation shall be allowed to enter the country.

## **CHAPTER 3: Exit Quarantine**

**Article 20** The owner or his or her agent of exit animals and plants, their products or other quarantine objects shall, before their exit, submit an application for quarantine inspection to the port animal and plant quarantine office.

The animals that need to be placed in isolation for quarantine inspection before exit shall be quarantined in an isolation court designated by the port animal and plant quarantine office.

Article 21 Export animals and plants, their products or other quarantine objects shall be quarantined by the port animal and plant quarantine office, and those that pass the quarantine inspection or conform to the standards after a treatment by disinfection and disinfestation shall be allowed to leave the country. The Customs shall, after verification, release the same on the strength of the quarantine certificates issued or the stamps on the customs declaration forms affixed by the port animal and plant quarantine office. Those that fail in the quarantine inspection and are unable to be treated by disinfection and disinfestation with effective methods shall not be allowed to leave the country.

GAIN Report #CH9010 Page 109 of 177

**Article 22** Where the animals and plants, their products or other quarantine objects that have passed the quarantine inspection are involved in any of the following circumstances, the owner or his or her agent shall re-apply for quarantine inspection:

- (1) where the importing country or region in changed, and the changed importing country or region had different requirements for quarantine inspection;
  - (2) where the packings are changed or the unpacked products or objects are subsequently packed; or
  - (3) where the stipulated valid period of quarantine is exceeded.

## **CHAPTER 4: Transit Quarantine**

**Article 23** Whoever requests a transit of animals through the Chinese territory must obtain in advance the consent of China's state animal and plant quarantine department and the transit must be conducted through the designated port and route.

The means of transport, containers, feeding stuffs and bedding materials for the animals in transit must all confirm to China's regulations on animal and plant quarantine.

- **Article 24** The transit of animals and plants, their product or other quarantine objects requires the consignor or the escort to submit at the port of entry the bills of lading and the quarantine certificates issued by the animal and plant quarantine department under the government of the exporting country or region to the port animal and plant quarantine office for quarantine inspection. No further quarantine inspection is needed at the port of exit.
- **Article 25** The transit animals that pass the quarantine inspection shall be allowed to pass through the country; and in case any infectious or parasitic disease of animals specified in the catalogues as stipulated in Article 18 of this Law is discovered, the entire flock of the animals shall not be allowed to transit.

The transit animals' feeding stuffs that are contaminated with diseases, insect pests or harmful organisms shall be subjected to such treatments as disinfection and disinfestation, denial of transit or destruction.

The carcasses, excrements, bedding materials and other wastes of the transit animals must be disposed of in accordance with the regulations of the animal and plant quarantine department, and may not be cast away without authorization.

- Article 26 The port animal and plant quarantine office shall examine the means of transport and the packings, in respect of the transit plants, animal and plant products or other quarantine objects, which shall be allowed to transit through the country if they pass the quarantine inspection; in case any disease, in sect pest or harmful organism specified in the catalogues as stipulated in Article 18 of this Law is discovered, it shall be subjected to a treatment of disinfection and disinfestation or denial of transit.
- Article 27 Animals and plants, their products or other quarantine objects, in the course of their transit, may not be unpacked or discharged form the means of transport without the approval of the animal and plant quarantine organ.

## CHAPTER 5: Quarantine of Materials Carried by Passengers or by Post

**Article 28** Whoever intends to carry or post plant seeds, seedlings or other propagating materials into the country must submit an application in advance and go through the formalities for examination and approval of quarantine

GAIN Report #CH9010 Page 110 of 177

inspection.

**Article 29** The catalogues of the animals and plants, their products and other quarantine objects that are not allowed to be carried or posted into the country shall be worked out and announced by the department of agriculture administration under the State Council.

In case any animals and plants, their products or other quarantine objects specified in the catalogues mentioned in the proceeding paragraph are carried or posted into the country, they shall either be returned or destroyed.

**Article 30** Whoever enters the country carrying animals or plants, animal or plant products or other quarantine objects which are not included in the catalogues specified in Article 29 of this Law shall declare them to the Customs at the port of entry and accept the quarantine inspection by the port animal and plant quarantine office.

Whoever carries animals into the country must hold such papers as quarantine certificates issued by the exporting country or region.

- Article 31 The port animal and plant quarantine office shall, in respect of the animals and plants, their products or other quarantine objects not included in the catalogues specified in Article 29 of this Law, carry out quarantine inspection at the International Postage Exchange Bureau, or, when necessary, take the same back to the port animal and plant quarantine office for quarantine inspection; and the same shall not b transported or delivered without undergoing quarantine inspection.
- Article 32 Animals or plants, animal or plant products or other quarantine objects that enter the country by post shall be released if they pass the quarantine inspection or conform to the standards after the treatment of disinfection and disinfestation; those that fail in quarantine inspection and are unable to be treated by disinfection and disinfestation with effective methods shall be returned ore destroyed, and the Quarantine Treatment Notice shall be issued.
- **Article 33** The animals or plants, animal or plant products or other quarantine objects that are carried or posted out of the country shall be quarantined by the port animal and plant quarantine office, upon request by the owner thereof

## **CHAPTER 6: Quarantine of Means of Transport**

- Article 34 Ships, airplanes or trains from the animal or plant epidemic areas shall, upon their arrival at the port, be quarantined by the port animal and plant quarantine office. In the event any disease, insect pest or harmful organism specified in the catalogues mentioned in Article 18 of this Law is discovered, the cargoes shall be subjected to such treatments as prohibition from discharge from the means of transport, disinfection and disinfestation, sealing up or destruction.
- **Article 35** Vehicles entering the country shall be disinfected for epidemic prevention by the port animal and plant quarantine office.
- Article 36 The swills and wastes of animal or plant nature on the means of transport entering or leaving the country shall be disposed of in accordance with the regulations of the port animal and plant quarantine office and may not be cast away without authorization.

GAIN Report #CH9010 Page 111 of 177

**Article 37** The means of transport carrying export animals and plants, their products or other quarantine objects shall conform to the regulations on animal and plant quarantine and epidemic prevention.

**Article 38** The old and disused ships entering the country for disassembling purposes shall be quarantined by the port animal and plant quarantine office. In the event that diseases, in sect pests or harmful organisms specified in the catalogues mentioned in Article 18 of this Law are discovered, the said ships shall be subjected to a treatment of disinfection and disinfestation.

## **CHAPTER 7: Legal Responsibility**

- **Article 39** Whoever, in violation of this Law, commits any of the following acts shall be fined by the port animal and plant quarantine office:
- (1) failing to apply for quarantine inspection or failing to go through the formalities for examination and approval of quarantine inspection in accordance with the law;
- (2) unloading animals or plants, animal or plant products or other quarantine objects entering the country from the means of transport or transporting or delivering the same, without permission of the port animal and plant quarantine office; or
- (3) transferring or disposing of, without authorization, the animals or plants subjected to quarantine inspection in an isolation court designated by the port animal and plant quarantine office.
- **Article 40** Where the animals or plants, animal or plant products or other quarantine objects declared for quarantine inspection do not conform to the actual conditions, the applicant shall be fined by the port animal and plant quarantine office; and the quarantine certificates already obtained shall be revoked.
- **Article 41** Whoever, in violation of this Law and without authorization, unpacks the packings of transit animals or plants, animal or plant products or other quarantine objects, discharges transit animals or plants, animal or plant products or other quarantine objects from the means of transport, or casts away transit animals' carcasses, excrements bedding materials or other wastes, shall be fined by the port animal and plant quarantine office.
- **Article 42** Whoever violates the provisions of this Law and causes a serious animal or plant epidemic shall be investigated for criminal responsibility by applying mutatis mutandis the provisions of Article 178 of the Criminal Law.
- **Article 43** Whoever forges or alters the quarantine certificates, stamps, marks or seals shall be investigated for criminal responsibility in accordance with the provisions of Article 167 of the Criminal Law.
- **Article 44** If a party is not satisfied with the decision on punishment made by an animal and plant quarantine organ, it may, within 15 days after receipt of the notification of the punishment, apply for reconsideration to the organ at the level next higher over the organ that has made the decision on punishment; the party may also directly bring a suit in a people's court within 15 days after receipt of the notification of the punishment.

The reconsideration organ shall, within 60 days after receipt of the application for reconsideration, make a reconsideration decision. If the party is not satisfied with the reconsideration decision, it may, within 15 days after receipt of the reconsideration decision, bring a suit in a people's court. If the reconsideration organ fails to make a reconsideration decision within the prescribed period, the party may bring a suit within 15 days after the expiration of

GAIN Report #CH9010 Page 112 of 177

the period for reconsideration.

If the party neither applies for reconsideration within the time limit, nor brings a suit in a people's court, nor complies with the decision on punishment, the organ that has made the decision on punishment may apply to a people's court for compulsory execution.

**Article 45** Where a quarantine functionary of an animal and plant quarantine organ who abuses his or her power, practice favoritism or embezzlement, forges a quarantine result, or neglects his or her duty or delays the performance of quarantine inspection and the issuance of certificates, criminal responsibility shall be investigated according to law if the offence constitutes a crime; if the offence does not constitute a crime, the offender shall be subjected to administrative sanctions.

## **CHAPTER 8: Supplementary Provisions**

- **Article 46** As used in this Law, the following terms mean:
- (1) "Animal" means the live animals, whether domesticated or wild, such as livestock, poultry, beasts, snakes, tortoises, fishes, shrimps and prawns, crabs, shellfishes, silkworms and bees;
- (2) "Animal product" means the non-processed products or the processed products, from animals, still liable to spread epidemic diseases, such as raw hides, hairs, meats, viscera, fat and grease, aquatic animal products, dairy products, eggs, blood, semen, embryos, bones, hoofs and horns;
  - (3) "Plant" means cultivated plants, wild plants, their seeds and seedlings and other propagating materials;
- (4) "Plant product" means the non-processed products or the processed products, from plants still liable to spread diseases, insect pests or harmful organisms, such as grain, beans, cotton, oils, fibers, tobacco, kernel, dried fruits, fresh fruits, vegetables, raw medicinal herbs, logs and feeding stuffs;
- (5) "Other quarantine object" means animal vaccine, blood serum, diagnostic reagents, and wastes of animal or plant nature.
- **Article 47** If provisions of this Law contravene those of the international treaties concerning animal and plant quarantine which the People's Republic of China has concluded or to which China is a party, the provisions of the international treaties concerned shall prevail, with the exception of the treaty clauses on which the People's Republic of China has declared reservations.
- **Article 48** Port animal and plant quarantine offices shall collect fees, according to relevant regulations, for performing quarantine inspection. The measures for the collection of fees shall be worked out by the department of agriculture administration under the State Council together with the competent departments such as the pricing department under the State Council.
- **Article 49** The State Council shall, on the basis of this Law, formulate the implementing regulations.
- **Article 50** This Law shall come into force as of April 1, 1992. The Regulations of the People's Republic of China on the Import and Export Animal and Plant Quarantine promulgated by the State Council on June 4, 1982 shall be annulled as of the same date.

(In case of discrepancy between the English translation and the original Chinese text, the Chinese text

GAIN Report #CH9010 Page 113 of 177

shall prevail.)

GAIN Report #CH9010 Page 114 of 177

#### VI. OTHER SPECIFIC STANDARDS

#### A. CHINA ORGANIC FOOD (GREEN FOOD) STANDARDS

Organic food in China is better known as green food, a general concept of any safe, quality food free of pollution. Under the Chinese Ministry of Agriculture, a special agency called China Green Food Development Center is in charge of green food certification, management, and direction. In 1995, they published the Standards of Green Food which are still effective today. According to the Standards, there are two levels of green food: Class AA Green Food and Class A Green Food, among which only the Class AA Green Food is up to the Western standard of organic food. Class A Green Food is still considered safe but permits certain amounts of chemicals and pesticide to be used in production. For the official definition, please see the Standards of Green Food in annex ANX VI.1 of this report.

Organic food is still in the preliminary stage in China. By the end of 1998, more than 1300 food products in China had acquired the Green Food Certification, including certain brands of soybeans, cooking oil, vegetables, fruits, beverages, eggs, milk powder, seafood, and wine. That is a significant increase compared with none in the early 90's. However, only 2% (30 out of 1300) have obtained the Class AA approval, the equivalent of Western standard of organic food. These 30 products are mainly meant for the overseas market, particularly vegetables for export to Japan. It is the Class A Green Food that dominates the domestic market today. The reason for this is that few Chinese people understand organic food and are willing to pay more for the real organic food due to its high production cost.

Imported U.S. organic food is still price prohibitive now. Even the high-income people here can only accept the normal-priced imported food, very few can afford the more expensive organic food. Anyway, it is definitely a marketing advantage to have a Chinese green food logo on the product's packing, because Chinese people are becoming more health-conscious, realizing the dangers of chemicals and pesticides. According to China Green Food Development Center, no imported product has acquired a green food certificate. The Center would need to check the biological environment of the product first, which should be done in the product's home country. However, the Center is working with some American organic products organizations, such as Organic Crop Improvement Association (OCIA), to seek the possibility of mutual certification.

The Standards of Green Food we translated include the definition, the grading system, the biological environment standard of its origin, and the processing standards. In addition to that, there are 25 specific green food standards for products such as apples, cucumbers, red wine, milk powder, etc.. About 80 new specific standards have been drafted and are awaiting final approval from the Chinese Ministry of Agriculture.

**Note:** For the complete text of the China "Green Food" Standards, please see annex ANX VI.1 below.

GAIN Report #CH9010 Page 115 of 177

#### ANX VI.1 CHINA "GREEN FOOD" STANDARDS

## Design and Use of the Green Food Logo

2-1 Basic Style



Basic style for the combination of both Chinese and English names and color. The style requirements are that the Chinese names should be above the English names and align to each other from both left and right. The font size and space between each line is as the example on the right. The color of the Chinese name should be standard (C100Y90) The color of the English name should be C50Y80 or standard color.



Basic style for the combination of green logo and the Chinese and English names



Basic style for the combination of green logo and the Chinese and English names when they are placed in a colored background. The background color is standard color.



Basic style for the combination is printed black and white. Color: Chinese B100, English B70



## Handbook on the standardization for the design and use of trademarks and logos of Green Food in China

"Handbook on the Standardization for the Design and Use of Trademarks and Logos of Green Food in China" (hereinafter referred to as the handbook), which is centered with a green food logo diagram (hereafter referred to as Green Logo), is a guide book standardizing the design and use of the green food logo, the four Chinese characters of "Green Food" and its English equivalent and their related combination on products and the media of advertising. It is

GAIN Report #CH9010 Page 116 of 177

primarily intended for use by the administrative setup of green food, the user of green food trademark and advertising design and production firms.

This handbook is directly based on the requirements for the development of green food business and is finished on the basis of "Handbook on the Standardization of Design of Green Food" which was designed and set in 1991. After much revision and perfection, it is an important step towards the implementation of CI strategy for green food business.

This handbook is divided into three systems, namely basic system, trademark application system and popularization advertising system. The basic system sets standard requirements for basic elements such as green logo, standard color and standard character. In whatever media this mark is used, the whole should be reduced or enlarged in proportion and no alteration is allowed as to the size between each important element. The trademark application system is a uniform standard to the product when the green logo is used as a trademark. When it is used, proper use of the mark is required according to the stipulations set forth in this handbook. Wherever this mark appears, the identity mark for registered trademark ® should be attached. Where the handbook fails to give definite requirements, the self-designed documents should be submitted to our center for approval before it is put into use. The popularization and advertising system are some examples when the green logo and related descriptions are used as corporate image on all goods and media that are capable of being used as the carrier. When in use, try to be as close as possible to the styles in the examples.

This handbook plays an important role in the whole image of the green food business and strengthens the management for the use of green logo. Each organization sanctioned by this center with the right to use this logo must use this logo on the packaging and advertising of green food strictly according to this handbook.

The explanation of this handbook is subject to the China Green Food Development Center.

China Green Food Development Center, October 1997

## **SECTION 1: Concept of Green Food**

#### Green Food

Refers to safe, quality and nutritious food certified by specific departments and on the package of which the mark of green food can be used.

#### Class AA Green Food

Refers to products: that are produced in a place where the quality of the ecological environment meets the required standards and that during the production no harmful chemical compounds are used; that are produced and processed in accordance with specific production operation norms; that the quality and packaging of which are found to have met the specific standards after inspection; and that are authorized by relevant departments to use the mark of Class AA Green Food.

#### Class A Green Food

Refers to products: that are produced in a place where the quality of ecological environment meets the required standards and during the production some limited types of chemical compounds are used with limited quantity; that are produced and processed in accordance with specific production operation norms; that the quality and packages of

GAIN Report #CH9010 Page 117 of 177

which are found to have met the specific standards after inspection and that are authorized by relevant departments to use the mark of Class A Green Food.

#### **SECTION 2: Classification Standards for Green Food**

## **Standard Composition of Green Food**

The standards of green food comprise environmental quality standard, production operation norms, product standard, storage and transportation standards and other related standards. It is a complete system of quality control standards.

The quality standard of ecological environment of green food production base refers to the following: No direct industrial contamination within the growing region of the primary agricultural product or main food material and no contamination threat is posed in the upper stream and windward side, and the air, quality of soil and irrigation water, quality of water for raising animals all meets the standards of air quality, soil quality and food quality required for green food. Also there is a set of safeguard measures to ensure that the quality of environment shall not be reduced during the process of production in the future.

The production operation norms for green food include standard procedures which all chains of production must follow including the cultivating sector, animal husbandry sector and food processing sector as well as principals of use by sectors of agricultural chemicals, fertilizers, food additives, feed additives and vet medicine.

The production standards of green food are set in reference to standards of certain international, state, departmental and industrial levels. Typically they are higher or equals to the existing standards with items of inspection and tests added to some standards. The standards of green food comprise two sections, quality and hygienic standard, with the latter involving agricultural chemical residue, harmful heavy industry contamination and harmful micro organism contamination.

The packaging and decoration of green food products should meet the requirements of the Handbook on the Standardization of Design of Logo for Green Food. Organizations that qualified to use green food logos should use them on both the inside and the outside of packages. The handbook sets out strict regulations concerning the standard design of the green food logo, standard font, the standard combination of design and text, standard color, advertising language and standard design used on food packages in series. Examples are also given for the guidance of application.

On the basis of taking reference of certain food standards in foreign countries similar to green food and taking into consideration the specific conditions of our country, we divide green food into two categories, namely Class AA Green Food and Class A Green Food.

#### Standards of Class AA Green Food

#### **Standard quality of environment**

The quality evaluation of atmosphere for green food adopts the first class standard of the State's atmosphere environment quality standard GB3095-82. The evaluation of irrigation water for fields adopts the standards of water quality for field irrigation GB5084-92. The water quality evaluation for water used for raising animals adopts the standards of the State's water quality for fishery sector GB11607-89. The evaluation of processing water adopts the standards of living and drinking water quality GB5749-85. The evaluation of drinking water for poultry and livestock adopts the standards of class three of the State's surface water quality GB3838-88. The evaluation of soil adopts the

GAIN Report #CH9010 Page 118 of 177

average value of background value of such type of soil (for details, refer to Background Values of China's Soil Environment compiled by China General Station for the Monitoring of Environment) plus twice the standard difference. All data monitored for the environment in the location of green food production shall not exceed related standards.

### **Production operation norms**

No harmful chemical compound fertilizers, agricultural chemicals and chemical food additives are allowed to be used during the production of Class AA Green Food. Its evaluation standards adopt related clauses in "Rules for the Use of Agricultural Chemicals during the Production of Green Food", "Rules for the Use of Fertilizers during the Production of Green Food" and "Production Operation Norms in related regions".

#### **Product standards**

No agricultural chemical compounds of any kind or chemical compounds of food additives should be detected. Other specifications should meet the industry standards of Class A for green food products set by the Ministry of Agriculture (NY/T268-95 to NY/T292-95).

### **Packaging standards**

Evaluation of green food packages adopts state's standards concerning related packaging materials, state's general standards for labeling on food products GB7718-94 and Handbook on Standardization of Design of Green Food Marks issued by Ministry of Agriculture and some related regulations. The green food mark and standard characters are the color green and the background is white.

### Standards of Class A Green Food

#### Standards of environmental quality

The evaluation of standards of environmental quality for Class A Green Food is the same as Class AA Green Food with the difference that the method of evaluation adopts comprehensive contamination index method. The comprehensive contamination index for each monitored item including the atmosphere, soil and water shall not exceed 1

## **Production operation norms**

During the production of Class A Green Food products, a certain limited amount of chemical compounds can be used. Its evaluation adopts the Rule for the Use of Agricultural Chemicals in the Production of Green Food, the Rule for the Use of Fertilizers in the Production of Chemicals and some related clauses in "Production Operation Norms in the Production of Green Food" in concerned regions.

#### **Product standards**

Industrial standards for Class A Green Food by the Ministry of Agriculture is adopted. (NY/T268-95 to NY/T292-95).

### **Packaging standards**

The evaluation of packaging of Class A green food adopts the related standards concerning packaging materials set by the state, state's general standards for labeling of food products GB7718-94 and the "Handbook on Standardization of Design of Green Food Marks" issued by the Ministry of Agriculture and some related regulations. The green food mark and standard characters are the color white and the background is green.

GAIN Report #CH9010 Page 119 of 177

## SECTION 3: Quality Standards of Ecological Environment in Production Place of Green Food

## 1. Contents of Theme and Application Range

This standard defines the quality of the ecological environment in green food production areas including atmospherical environment, field irrigation water, water used in fishery, processing water, drinking water for livestock and poultry, items of soil quality monitoring, its standards and monitoring methods.

This standard is applicable to green food production areas (Class AA and Class A), the place of production of raw materials, the place for raising livestock and poultry and for livestock farming, the breeding place of fisheries and the place for manufacturing feeds.

## 2. Terminology

#### 2.1 Green Food

It refers to safe, quality, nutritious food certified by special authorities and is allowed to use green food marks and is pollution-free.

#### 2.2 Class AA Green Food

It refers to the product that the ecological environmental quality where it is used meets the stipulated standards and during the production no harmful chemical compounds are used, the production and processing are performed according to specific operation norms, the quality and packaging meet specific standards after being tested and inspected and which has been certified by the relevant authorities and is allowed to use Class AA Green Food mark.

#### 2.3 Class A Green Food

It refers to the product that the ecological environmental quality meets the stipulated standards and during the production only a limited amount of limited types of chemical compounds are permitted, the production and processing are performed according to specific operation norms, the quality and packaging meet specific standards after being tested and inspected and which has been certified by the relevant authorities and is allowed to use the class A Green Food mark.

#### 3. Quoted standards

GB3095-82 Atmospheric environment quality standards
GB5084-92 Field irrigation water quality standards
GB11607-89 Fishery water quality standards
GB5749-85 Drinking water quality standards
GB3838-88 National surface water environment quality standards

## 4. Ecological environment quality standards (See table below )

GAIN Report #CH9010 Page 120 of 177

## 4.1 Atmosphere environment quality standards

Item		Standards	
	Daily average	Any time	Unit
$SO_2$	0.05	0.15	Emg/m <sub>3</sub>
Nitrogen Oxide	0.05	0.10	
Total suspended particle	0.15	0.30	
F	7		ug/dm <sup>2</sup> *d

! "Daily average" is the allowed limit for the average concentration on any day.

! "Anytime" is the allowed limit for concentration at any sampling. Sampling time is thrice per day at 7:00-8:00, 14:00-15:00, and 17:00-18:00 for 3 consecutive days.

## 4.2 Field irrigation water quality standards

Item	Standards
pH Value#	5.5-8.5
Total Hg#	0.001
Total Cal#	0.005
Total As#	0.05(water field, vegetable)0.1(dry crop)
Total Pb#	0.1
Cr (sexavalence) #	0.1
Chlorate#	250
Fluorate#	2.0(high fluorate region)3.0(ordinary region)
Cyanate#	

## 4.3 Fishery water quality standards

1.5 I islied y weller quite	· <b>y</b> · · · · · · · · · · · · · · · · · · ·
Item	Standards
Hg#	0.0005
Cal#	0.005
Pb#	0.05
As#	0.05
Cr (sexavalence) #	0.1
Cyanate#	0.005
Fluorate#	1
Solved oxygen#	5
Biochemically needed	5
amount of oxygen#	

4.4 Drinking water quality standards for livestock and poultry

GAIN Report #CH9010 Page 121 of 177

Item	Standards
Hg#	0.0001
Cal#	0.005
Pb#	0.05
As#	0.05
Cr (sexavalence) #	0.005
Cyanate#	0.005
Fluorate#	1.0
Chlorate	250
pH value	6.5-8.5

## 4.5 Processing water quality standards

Item	Standards
Hg#	0.001
Cal#	0.01
Pb#	0.05
As#	0.01
Cr (sexavalence) #	0.05
Cyanate#	0.05
Fluorate#	1.0
Chlorate	250
Total bacteria	100 count/ml
Total colibacilla	3 count/1
pH value	6.5-8.5

## 4.6 Soil quality standards

## 4.6.1 The following standards shall be applied if the soil is one of the types below (mg/kg):

Contaminants	H	<b>I</b> g	C	d	P	b	A	S	C	<sup>L</sup> r
Depth of soil	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm
layer										
Types of soil										
Spongy soils	0.0356	0.0876	0.1634	0.187	22.42	38.62	14.38	14.38	88.58	75.7
Basket soil	0.1284	0.0256	0.2456	0.152	32.88	30.3	16.76	15.68	78.64	71.32
Black soils	0.0308	0.0314	0.1794	0.2232	25.7	24.34	16.9	15.28	74.2	74.62
Black earth	0.081	0.0762	0.1344	0.134	42.46	39.28	17.18	20.14	77.42	83.58
White pulp soil	0.069	0.1008	0.236	0.154	39.74	47.98	21.1	28.22	81.26	99.82
Chernozem	0.0582	0.038	0.2626	0.2434	34.34	31.78	19.26	20.14	99.5	101.64
Moisture soil	0.1512	0.0698	0.2326	0.2098	37.7	41.06	15.78	16.82	98.06	104.68
Oasis soil	0.0512	0.0524	0.1826	0.1932	28.92	29.38	17.34	20.12	83.46	77.58
Paddy soil	0.551	0.2078	0.377	0.252	66.64	50.16	22.38	20.2	127.28	125.6
Laterite	0.0984	0.0704	0.2716	0.2346	63.14	77.78	17.18	27.64	233.36	256.44

GAIN Report #CH9010 Page 122 of 177

Contaminants	Н	Ig	C	d	P	'b	Α	\S	C	Cr Cr
Depth of soil	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm
layer										
Types of soil										
Crimson soil	0.133	0.1722	0.1554	0.1462	83.76	105.64	36.36	62.9	107.3	133.68
Red earth	0.18	0.1866	0.1936	0.1862	54.66	66.12	39.34	35.78	150.44	124.8
Yellow earth	0.2136	0.2636	0.1854	0.1736	56.34	81.9	32.68	35.14	108.1	198.94
Dry red soil	0.0534	0.111	0.4488	0.3348	76.02	94.48	51.94	32.34	110.18	97.8
Yellow brown	0.2138	0.1572	0.2812	0.1892	53.4	44.52	24.22	25.74	118.4	122.44
earth										
Brown earth	0.1486	0.1766	0.2068	0.1948	44.98	46.1	23.5	24.4	131.2	141.3
Cinnamon soil	0.1242	0.114	0.2406	0.2342	35.08	40.9	20.28	20.7	98.38	111.46
Taupe soil	0.0482	0.0438	0.2756	0.1628	25.2	26.56	16.76	20.54	88.02	98.74
Dark brown	0.1088	0.1008	0.2236	0.2036	38.72	40.66	14.38	18.16	103.94	125.58
earth										
Brown	0.1542	0.1222	0.2376	0.1028	34.86	34.82	13.34	35.9	80.58	84.64
coniferous										
forest soil										
Grey forest soil	0.1828	0.288	0.1506	0.0684	30.54	24.06	19.06	16.84	88.28	103.22
Chestnut soil	0.0778	0.0876	0.1859	0.2124	43.08	41.02	21.8	25.6	101.76	99.98
Brown soil	0.034	0.0252	0.2876	0.2264	39.06	40.52	19.38	22.34	72.54	82.1
Sierozem	0.0294	0.0298	0.1498	0.1772	23.8	24.24	15.82	16.28	77.72	67.6
Desert grey soil	0.0222	0.0202	0.1826	0.1452	32.24	32.34	15.78	14.62	91.48	82
Desert grey	0.0504	0.0402	0.1952	0.173	27.58	37.82	21.1	37.94	83.4	89.2
brown soil										
Desert brown	0.032	0.0398	0.1684	0.1588	26.76	27.22	17.06	16.1	80.22	74.08
soil										
Meadow soil	0.1188	0.078	0.1758	0.1344	40.52	35.98	20.1	26.84	89.1	93.66
Boggy soil	0.1244	0.0562	0.2128	0.246	37.4	35.24	27.52	30.62	124.58	108.74
Saline soil	0.1426	0.11	0.2478	0.2416	43.8	36.38	22.42	23.9	105.24	105.86
Alkaline soil	0.064	0.0354	0.1764	0.1646	26.04	33.74	15.54	12.08	67.04	78
Phosphorite	0.1116	0.0654	2.4544	1.5652	3.98	2.34	4.68	5.7	24.18	34.4
Rendzinas	0.5212	0.742	5.553	7.1566	82.78	60.32	75.2	105.48	255.96	285.42
Purple soil	0.1436	0.15	0.227	0.2352	49.14	51.14	18.58	23.8	115.78	101.86
Sand soil	0.0518	0.0258	0.094	0.092	23.58	23.68	8.1	8.56	51.26	54.54
Black felt soil	0.0636	0.066	0.192	0.1696	58.36	46.76	31.46	32.44	123.46	133.56
Grass felt soil	0.0456	0.0398	0.222	0.1972	48.32	65.5	33.14	47.9	155.3	156.88
Baga soil	0.0452	0.646	0.3194	0.168	38.5	52.22	42.82	38.68	141.22	159.98
Saga soil	0.037	0.044	0.2194	0.2116	40.92	39.9	43.42	37.08	185.74	134.86
Cold desert soil	0.0304		0.1142		51.78		29.1		95.36	
Alpine desert	0.0526	0.1492	0.2556	0.3528	40.28	51.68	28.92	39.7	2.56	111.32
soil										
Benzex#0.1					DDT#0.	1				

GAIN Report #CH9010 Page 123 of 177

4.6.2 The following standards shall be applied if the soil is not one of the types above

Contaminants	Standards mg/kg
Hg, Cd, Pb, As, Cr	#arithmetic average of local soil background
	value(background value) + twice the standard difference
Benzex,DDT	#0.1

- 4.7 Standards of evaluation of ecological environment
- 4.7.1 Class AA: Data inspected for each item of atmosphere, water quality and earth must not exceed related standards.
- 4.7.2 Class A: Comprehensive contamination index of atmosphere, water quality and earth must not exceed 1.

## 5. Methods of sampling and monitoring

The methods of sampling and monitoring in this standard shall apply related regulations in Essentials of Evaluation of Environmental Quality Status of Production Place of Green Food (Proposed).

## **Additional description:**

This standard is put forward by the China Green Food Development Center

This drafting of this standard is under the supervision of the Center for the Supervision, Inspection and Testing of Environmental Quality under the Ministry of Agriculture (Jinan).

Chief drafters: Wang Hongtao, Sun Guilan, Xu Zhiqiang, Zhang Yufang, Zhang Feitingm, Yao Xilai, Yuan Jie and Xue Xinhong.

## **SECTION 4: Operation Rules for the Production of Green Food**

The operation process standards for the production of green food includes the use rules for agricultural chemicals, fertilizers, food additives, veterinary medicines and feed additives and operation rules for the production of each product adapted for the seven climate regions of south China, central China, east China, southwest China, north China, northeast China and northwest China according to the above rules. Some rules remain to be defined and operation rules for the production of green food in each climate region shall be printed separately.

#### Rules for Use of Fertilizers in the Production of Green Food

## 1. Contents of theme and scope of applications

This standard defines the types of fertilizers and compositions and their rules of use which are allowed for use in the production of class AA and class A Green Food.

This standard applies to all farm manure, commercial organic fertilizers, humic acid fertilizers, microbiological fertilizers,

GAIN Report #CH9010 Page 124 of 177

semi-organic fertilizers (organic compound fertilizers), inorganic (mineral) fertilizers and foliage fertilizers.

## 2. Terminology

#### 2.1 Green Food

It refers to safe, quality, nutritious food certified by relevant authorities which is permitted to use green food marks and is pollution-free.

#### 2.2 Class AA Green Food

It refers to the product of which the ecological environmental quality meets the stipulated standards and during the production of which no harmful chemical compounds are used, the production and processing are performed according to specific operation norms, the quality and packaging meet specific standards after being tested and inspected and which has been certified by relevant authorities and is allowed to use the Class AA Green Food mark.

#### 2.3 Class A Green Food

It refers to the product of which the ecological environmental quality meets the stipulated standards and during the production only a limited amount of limited types of chemical compounds are allowed to be used, the production and processing are performed according to specific operation norms, the quality and packaging meet specific standards after being tested and inspected and which has been certified by relevant authorities and is allowed to use the Class A Green Food mark.

### 2.4 Farm Manure

It refers to all kinds of organic fertilizers taken from the farm, composted and used on the farm.

## 2.5 Commercial Fertilizers

Fertilizers which are sold as commodities under the control of the state fertilizer department according to the rules and regulations of the state.

## 3. Types of Fertilizers Permitted

#### 3.1 Farm Manure

It refers to fertilizer that contains a lot of biological substances, remains of animals and plants, feces and biological wastes. Applying farm manure not only provides farm crops with complete nutrition, but also can have a lingering period of fertilizer effect. It can increase and upgrade the organic substances in the soil, boost the breeding of microbes and improve the physical and chemical natures and biological activity of the soil and is the main source of nutrition for the production of green food.

#### 3.1.1 Composts

GAIN Report #CH9010 Page 125 of 177

A kind of organic fertilizer that is made by composting all kinds of straw, leaves, grass, water and a little amount of soil. 3.1.2 Wet Composts

The materials used are basically the same as composts with the difference that wet composts are made by being submerged in water (anaerobic treatment) through fermentation.

#### 3.1.3 Animal Manure

It refers to fertilizer made by composting feces of pigs, cattle, horses, sheep and poultry with straw and other materials.

## 3.1.4 Methane Manure

It refers to by-product of organic substance after being treated anaerobically in a sealed methane-generating pit. It includes liquefied methane gas and residues.

#### 3.1.5 Green Manure

It refers to fertilizer used from green plants either cultivated or growing in the wild. It is mainly composed of two categories - leguminosae and nonleguminosae. Leguminosae green manure includes mung bean, broad bean, sweet clover, Sadawan, sesban, lucerue, tamarix hemp, Chinese milk retch, and Chinese trumpet creeper.

Nonleguminosae plants most often used as green manure are the grass family such as rye; the Cruciferae such as fertilizing turnip; the composite family such as swelt-stem chrysanthmum and little sunflower; Azolla imbricata; Pontederiaceae such as water hyacinth and Amaranthaceae such as alternanthera philoxeroides.

### 3.1.6. Crop Straw

The straws of crops are one of the most important sources of organic fertilizers. They contain considerable amounts of nutritious elements necessary to the crops such as N, P, K, Ca, and S. Under appropriate conditions with the effect of microbes in the soil, these elements return to the soil after being mineralized and are absorbed and utilized by crops.

#### 3.1.7. Sludge

Unpolluted sludge from rivers, pools, canals, harbors and lakes.

#### 3.1.8. Cake Fertilizer

It refers to fertilizers such as rapeseed cake, cottonseed cake, soybean cake, sesame cake, cater cake and tea seed cake.

#### 3.2 Commercial Fertilizers

## 3.2.1. Commercial Organic Fertilizers

GAIN Report #CH9010 Page 126 of 177

They refer to commercial fertilizers made from a large amount of biological substances, remains of animals and plants, feces and biological wastes.

#### 3.2.2. Humic Acid Fertilizers

They refer to fertilizers that contain humic acid type substances such as peat (turf), lignite and dandy.

#### 3.2.3. Micro Fertilizers

They refer to active microbiological preparations produced with a specific growth medium. It is non-toxic, nonharmful and does not cause pollution to the environment. Through live activity of specific microbes, it can improve the nutrition of plants, generate plants growing hormone and boost the growth of plants. It is divided into five categories according to the different nutritional elements it improves:

## 3.2.3.1. Nitrogen

It can form root nodules on leguminous plants and assimilate nitrogen from the air thus improving the nitrogenous nutrition of the leguminous plants. Groundnuts, soybeans and mug beans have this capacity.

## 3.2.3.2. Nitrogenfixing Bacteria Fertilizer

It can fix nitrogen from the air in soil and at roots of many crops and provide nitrogenous nutrition to the crops. It can also excrete hormone to stimulate the growth of the crops. There are Azotobacteraceae and combined azotobacterins.

#### 3.2.3.3. Phosphobacteria Fertilizer

It can turn the hard-to-dissolve phosphorus in the soil into effective phosphorus that the crops can use, thus improving the phosphoric nitration of the crops. There are phosphobacteria, phosphobacteriolysin, and mycorhiza.

#### 3.2.3.4 Silicate Bacteria Fertilizer

It can resolve aluminosilicate such as mica and feldspar and kietyoite that contain potassium in the soil and release potassium, phosphorus and other ash elements, and thus improves the nutritious conditions for the crops. Silicate bacteria and other micro preparations can release potassium.

#### 3.2.3.5 Compound Microbiological Fertilizer

They are preparations which contain more than 2 useful microbes (such as nitrogen-fixing bacteria, phosphobacteria, silicate bacteria or other bacteria) that do not fight against each other but rather improve one or more nutritious elements of the crops and contain physiologically active substances.

#### 3.2.4. Semi-organic Fertilizer (Organic Compound Fertilizer)

Fertilizer made of or compounded by mixing organic and inorganic fertilizers.

GAIN Report #CH9010 Page 127 of 177

3.2.4.1. Fertilizers made of feces of livestock and poultry after being treated to eliminate harmful elements and then combined with certain amounts of trace elements such as zinc, manganese, boron and molybdenum.

## 3.2.4.2. Dried Compound Fertilizer Made of Waste Yeasted Liquid

Fertilizer made with dried materials of waste liquid in the fermentation industry and some waste compounds left over after breeding mushrooms or raising poultry.

## 3.2.5 Inorganic (mineral) Fertilizer

Fertilizer that is made of minerals processed both physically and chemically and whose nutrition is in the form of inorganic salt.

- 3.2.5.1 Mineral Potassium Fertilizer and Potassium Sulfate Fertilizer
- 3.2.5.2 Mineral phosphoric fertilizer (ground phosphate rock)
- 3.2.5.3 Roasted phosphates calcium magnesium phosphate fertilizer and (defluorated phosphate fertilizer)
- 3.2.5.4 Lime: limited only for use in acid soil
- 3.2.5.5 Ground Sulfate Fertilizer: limited only for use in alkaline soil
- 3.2.6 Foliage Fertilizer

Fertilizer sprayed onto the foliage of plants and which can be absorbed by the plants. There must not be growth regulating agents in the foliage fertilizer that is compounded chemically.

#### 3.2.6.1 Trace Element Fertilizer

Fertilizer compounded chiefly with trace elements such as Cu, Fe, Wn, Zn, B, Mo and other useful elements.

3.2.6.2 Accessory Substance Fertilizer That Helps Growth of Plants

Fertilizer compounded by extraction liquid of natural organic matter and fermentation liquid which has been used for inoculating useful bacteria, plus some humid acid, algaesic acid, amino acid, vitamins and sugar.

- 3.3 Other Fertilizers
- 3.3.1 Including organic by-products of food making and textile industry that do not contain compound additives.
- 3.3.2 Including fertilizers that are made of fishmeal, wool wastes of oxen and sheep, bonemeal, amino acid residue, bone glue residue, wastes of livestock processing and wastes of sugar refineries that do not contain preservatives.

GAIN Report #CH9010 Page 128 of 177

#### 4. Rules of Use

The use of fertilizers must ensure sufficient amount of organic substances return to soil, thus to maintain or increase the fertility of the soil and biological activity of the soil. All organic or inorganic (mineral) fertilizers, especially fertilizers that contain rich nitrogen should be used in such way that will not cause bad effect on either the environment or the crop (nutrition) taste, quality and plant resistance.

- 4.1 Rules of Fertilizer Use for Class AA Green Food
- 4.1.1 Select those types of fertilizers that can be used according to this standard. Other chemical compound fertilizers are not allowed.
- 4.1.2 Harmful city rubbish and sludge are not allowed to use as fertilizers. Feces and rubbish from hospitals and industrial rubbish that contain harmful substances such as toxic gas, pathogenic microorganisms and heavy metals are forbidden to collect as fertilizers for producing green food.
- 4.1.3 Return of straw to the field: There are many forms including return to field of composts (composted manure, wet composted manure, methane manure), return to field by direct overturning and pressing and return to field as covering. These forms can be used according to actual conditions of each locality. When straw is put into the soil directly, ensure that it is covered closely with soil and no root being supported emptily is allowed. Some human and animal urine which contain rich nitrogen should also be added to facilitate the decomposition of straw.
- 4.1.4 Green Manure: There are forms of overlapping, turning into the soil and compound composting. When cultivating green manure, it is better to overturn and cover them when they are in full bloom. The depth of cover should be about 15cm. Soil should completely cover the green manure and should be raked even afterwards. Seed planting or seedling transplanting should be performed only 15-20 days after green manuring.
- 4.1.5 Methane fertilizer water which is fermented and has met the requirements of decontamination and fermented excrement and urine of humans and livestock can be used as additional manure. Spraying unfermented human excrement and urine on crops such as vegetables is strictly forbidden.
- 4.1.6 Cake fertilizers have a good effect on fruits and vegetables. Fermented cake fertilizers can be used more often than normal.
- 4.1.7 Foliage fertilizers are dressed onto the foliage of crops. They can be applied once or more times but the last application should occur 20 days before harvest.
- 4.1.8 Micro organic fertilizers can be used as basic fertilizer and additional fertilizer as well as used to mix seeds with. Strictly follow the instruction of the manual when performing such operation. Micro organic fertilizers have the outstanding effects of reducing the content of nitrates in the vegetables and improving their qualities. They can be used increasingly on vegetables with sufficient planning.

GAIN Report #CH9010 Page 129 of 177

- 4.2 Rules of Fertilizer Use for Class A Green Food:
- 4.2.1 Try to select the kind of fertilizers that this rule stipulates. If necessary in production, the production base can be allowed to use limited amounts of certain chemical compound fertilizers. However, nitrate type nitrogen fertilizers are forbidden.
- 4.2.2 Chemical fertilizers should be used together with organic fertilizers. The ratio of organic nitrogen to inorganic nitrogen should be 1:1, about 1000 kg animal manure plus 20 kg urea (with animal manure as basic fertilizer and urea as either basic fertilizer or additional fertilizer). The last application of fertilizer should be done 30 days before harvest.
- 4.2.3 Chemical fertilizers can be used with organic fertilizers and micro organic fertilizers, 1000 kg animal manure plus 10 kg urea or 20 kg dioammonium phosphate and 60 kg micro-organic fertilizers (with animal manure as basic fertilizer, urea, dioammonium phosphate and micro organic fertilizers as either basic fertilizers or additional fertilizers). The volume adjustment can be done for vegetables and fruits according to the above proportion. The last application of fertilizer should be done 30 days before harvest.
- 4.2.4 Under certain conditions, it is safe to use urban residential refuse. But care should be taken to prevent the entering of metal, rubber and debris and pay attention to heavy metal and harmful substances that are often found in housing refuse. Therefore urban residential refuse must be de-contaminated and meet the state standards before they are used as fertilizers. The usage amount limit per *mu* (0.0667 hectares) annually is 3000 kg for cohesive soil and 2000 kg for sandy soil.
- 4.2.5 Return of straw to fields: The same as 4.1.3, also can use small amount of nitrogen fertilizer to regulate the ratio of carbon and nitrogen

#### 5. Other Rules

- 5.1 The method of burning straw to return ash to field should be used only in the paddy that has a serious occurrence of pests. Try to avoid the approach of blindly burning straw.
- 5.2 No matter what materials are used to make composts to be used as farm manure to produce green food (including excrement and urine by human, livestock and poultry, straw, weeds and peat), they should be fermented under high temperature to kill all kinds parasite eggs, pathogenic bacteria and seeds of weeds, and to eliminate harmful organic acid and harmful gases to reach the standards of decontamination and hygiene. Farm manure should be principally produced and used locally. External farm manure can only be used after it is confirmed that it has met the requirements. Commercial fertilizers and new type fertilizers must pass the registration and production licence system by related government departments.
- 5.3 If applying fertilizers causes pollution to soil and water source, or hampers the growth of crops and the farm produce cannot meet the standards of hygiene, such fertilizers should be suspended and reported to the China Green Food Development Center and provincial Green Food Office. The food produced with such fertilizers can no longer use the green food mark.

GAIN Report #CH9010 Page 130 of 177

## **Additional description**:

This standard is put forward by the China Green Food. Development Center This standard is drafted by the Institute of Soil and Fertilizer, China Academy of Agricultural Science. The chief drafters were Li Yuanfang and Ceng Mu Xiang.

### SECTION 5: Regulations on Pesticides Use in the Production of Green Food

## 1. Contents of theme and scope of application allowed to use

This rule defines the types of pesticides, ratings of toxicity, hygienic standards and rules of use that are allowed to use for class AA and Class A Green Food production.

This rule applies to biogenic pesticides, pesticides of fossil origin and synthetic organic pesticides registered in our country.

### 2. Terminology

#### 2.1 Green Food

It refers to safe, quality, nutritious food certified by special authorities and is allowed to use green food marks and is pollution-free.

#### 2.2 Class AA Green Food

It refers to the product that the ecological environmental quality where it is used meets the stipulated standards and during the production no harmful chemical compounds are used, the production and processing are performed according to specific operation norms, the quality and packaging meet specific standards after being tested and inspected and which has been certified by the relevant authorities and is allowed to use Class AA Green Food mark.

#### 2.3 Class A Green Food

It refers to the product that the ecological environmental quality meets the stipulated standards and during the production only a limited amount of limited types of chemical compounds are permitted, the production and processing are performed according to specific operation norms, the quality and packaging meet specific standards after being tested and inspected and which has been certified by the relevant authorities and is allowed to use the class A Green Food mark.

### 3. Types of pesticides

3.1 Biotic pesticides refer to those pesticides that directly use the biological living body or substances generated during the metabolism process which have biological activity or substances extracted from the biological body to present and cure plant diseases and insect pests.

GAIN Report #CH9010 Page 131 of 177

## 3.1.1 Microbiogenic Pesticides

### 3.1.1.1 Agricultural antibiotics

To cure mycosis: blasticidin, Kasugarnyacin, polyoxin, Jingangmycin , agro-resistor 120 Acaricides :Liuyangmycin, Huaguangmycin

## 3.1.1.2 Living Body Microorganic Pesticides

Fungus preparation: green muscardine fungus, Shandong No.1. Bacteria preparation: bacillus thuringiensis, emulsus bacillocin.

Germicide: 5406, Caifengning B1

Nematode: Insect pathogenic nematodes.

Protozoa: microspore, protozoa

Viruses: nuclear polygon virus, granulate virus.

### 3.1.2 Faunogenic Pesticides

Insect pheromone such as sex information element.

Living body preparation: Natural animals of predatory and predatic nature.

## 3.1.3 Florogenic Pesticides

Pesticides: pyrethrum, Tubatoxin, nicotine and plant oil emulsion.

Germicide: garlicin

Preventative preparation: margasine, toosendanin.

Synergist: sesomyne

## 3.2 Pesticides of Fossil Origin

Pesticides of inorganic compounds and petroleum whose effective elements come from fossils.

## 3.2.1 Inorganic Preparations Which Kill Mycosis and Bacteria.

Sulfur preparation: sulfur suspending agent, settable sulfur and lime sulfur concentrates. Copper preparation, copper sulfate, *wang-tong*, copper hydroxide and Bordeaux mixture.

#### 3.2.2 Mineral Oil Emulsion

## 3.3 Synthetic Compound Pesticides

They are compounded artificially and produced in organic chemical plants, including pesticides, acaricides, germicides, and herbicides. They can be used in limited amounts in the production of class A Green Food.

GAIN Report #CH9010 Page 132 of 177

#### 4. Rules of Use

The production of green food should based on the whole ecological system from crops to plant diseases and insect pests. All kinds of preventive measures should be taken which create environmental conditions that are unfavorable to the breeding of insect pests and plant diseases, but are favorable to the breeding of those predators of insect pests, preserve the balance of the agricultural ecological system and variety of biologic forms and reduce the losses caused by all kinds of plant diseases and insect pests.

Agricultural measures should be prioritized. A series of measures should be taken such as selecting the types of grain which resist plant diseases and insect pests, treating seeds with non-chemical agents, cultivating strong seedlings, strengthening the management of cultivation, eliminating weeds when the crops are in the middle of growth period, polishing deep in autumn, cleaning fields, performing crop rotation and interplanting.

Measures that lure pests to their death with lamps and colors, that catch pests mechanically, and that eliminate weeds mechanically and manually should be taken when possible to prevent diseases, pests and weeds. Under special circumstances, when pesticides are necessarily needed, the following rules should be followed:

- 4.1 Rules for use of pesticide for Class AA Green Food Production.
- 4.1.1 Insecticide, germicide, preventatives preparation, synergist of plant origin are allowed to use. Such as: Pyrethrum, Tubatoxin, tobacco water, garlicin, margosine, toosendanin, *yin-jian-su*, sesomyne.
- 4.1.2 Natural enemy animals of parasitic and predatory nature as trichogramma, Ladybug, Predacious mite, various predacious spiders and insect pathogen etc. are allowed to be released.
- 4.1.3 Insect pheromone such as sex pheromone or other attractant of animal and plant origin are permitted for use in pest racquet organ.
- 4.1.4 Mineral oil emu and plant oil emu are allowed for use.
- 4.1.5 Sulphur preparation and copper preparation pesticide of mineral origin are allowed for use.
- 4.1.6 Pesticide of microbe body lining,, such as fungus preparations, bacteria preparations, virus preparations, actinomyces, *ji-kang-jun-ji*, insect etiology nematode, protozoon are allowed for use with limited amount.
- 4.1.7 Agricultural antibiotic, as Kasugarnyacin, Polyoxin, Jinggangmycin, agro-resistor 120 etc. are allowed for use with limited amount to prevent fungus diseases, and Liuyangmycin to prevent mites.
- 4.1.8. Organic-synthesized chemical such as insecticide, acaricide, germicide, herbicide and plant growth regulator are forbidden for use.
- 4.1.9. All kinds of preparations made by mixing pesticides of organism origin and organic-synthesized pesticide are forbidden for use.

GAIN Report #CH9010 Page 133 of 177

- 4.2 Rule for the use of pesticides in the production of Class A Green Food.
- 4.2.1 Pesticides of plant origin, animal origin and microbiological origin are allowed for use.
- 4.2.2 Preparations of sulfur and copper can be used in the pesticides of mineral origin.
- 4.2.3 Pesticides of extreme toxicity, high toxicity and high residue or pesticides causing cancers, abnormality and abrupt change (see attached table 1) are strictly forbidden for use.
- 4.2.4 If necessary in production, the production base is allowed to use certain organic synthetic chemical pesticides in limited amount and use these chemicals strictly in accordance with the methods defined in attached Table 2).
- 4.2.4.1 It is recommended to use pesticides of low toxicity and certain pesticides of medium toxicity listed in attached Table 2. If it is necessary to use new varieties not listed in attached Table 2, application should be filed to China Green Food Development Center for approval.
- 4.2.4.2 The final residue of organic synthetic pesticides in agricultural products should be controlled strictly. The lowest residue limit of international standards or ½ of the state standard should be adopted.
- 4.2.4.3 The interval between the final application of pesticides and the day of harvest should be no less than the days defined in attached Table 2 (the final application time in the production of green food is more strict than the safety interval stipulated by the state.)
- 4.2.4.4 Each organic synthetic pesticide can be used only once during the growing period of one crop (The times of use are much lower than the State standard).
- 4.2.4.5 When using pesticides of biological origin mixed with organic synthetic pesticides, only those listed in attached Table 2 can be used for chemical pesticides of mixed preparation.
- 4.2.4.6 The use of various genetically modified organisms (GMO) should be strictly controlled.

GAIN Report #CH9010 Page 134 of 177

## **Attached Table 1**

Varieties of chemical pesticides forbidden to use in the production of Class A Green Food

, <b>,</b> ,	Name of Pesticides	Crops	Reason of Forbidding
	rvanic of 1 esticides	Forbidden to	Reason of Foldidning
		be Used	
Organic arsenic pesticides	Calcium arsenate, lead arsenate	All crops	High toxicity
Organic arsenic germicides	Methyl zinc arsonate, methyl ferrous-ammonium arsonate, methyl asomate, asomate	All crops	High residual hazard
Organic tin germicides	Triphenyl tin acetate, triphenyl tin chloride and fentin hydroxide	All crops	High residue
Organic mercuric germicides	Ethyl mercury chloride, phenylmercuric acetate	All crops	Extreme toxicity, high residual hazard
Fluoride preparations	Calcium fluoride, Sodium fluoride, sodium fluoroacetate, flutritex, cryolite, sodium fluorosilicate	All crops	Extreme toxicity, high toxicity, easy to cause pesticide harm
Organic chloride pesticide	DDT, benzex, lindane, drinox, Dieldrite	All crops	High residual hazard
Organic chloride acaricide	Dicofol	Vegetables and fruit trees	Certain amount of DDT is contained in industrial products of our country
Haloalkane fumigate pesticides	Dimethyl dibromide, dibromochloropropane	All crops	Causing cancers and abnormalities
Organic phosphate pesticides	methsolfoton, disolfoton, Azodrin, parathion, methyl parathion, methamidophos, sulfotep, flolimat, phosphoamidon	All crops	High toxicity
Organic phosphate germicides	Kitazine, isokitazine	All crops	Rice with bad odor
Amino-based formic pesticides	aldicarb, aminocarb	All crops	High toxicity
Dimethyl formamidine pesticides and acaricides	Chlorphenamidine	All crops	Chronic toxicity, causing cancers
Synthetic pyrethroid insecticides	All synthetic pyrethroid insecticides	Paddy rice	Large toxicity to fish
Substituted benzene-group pesticides and germicides	Penlachloronitrobenzene, blastin	All crops	There is report abroad that these pesticides have caused cancers or second phytotoxicity

GAIN Report #CH9010 Page 135 of 177

Plant growth regulator	Organic synthetic plant	All crops	
	growth regulator		
Benzyl ether group herbicides	Nitrogen, cao-ku-mi	All crops	Chronic toxicity
Herbicides	All kinds of herbicides	Vegetables	

## **Attached Table 2**

The types of chemical pesticides, toxicity rating, allowed final residue limit, the interval between final application and date of harvest and methods of use are as below:

## 1. Organic pesticides and acaricides

## 1.1 Organic phosphate pesticides

Name of	Acute	Allowed	Interval between final	Normal amount of	Methods of
pesticides	oral	final residue	application and date	preparation g/timesCmu	application and
	toxicity	(mg/kg)	of harvest (days)	or ml/timesC mu or	maximum times of
				dilution times	application
Dichlorvos	Medium	0.1 (0.2)	Tea 10 (6)	50% emulsion 150-250g	Mist spraying once
				(1,000-800 times)	
		0.1 (0.2)	Vegetables 10 (7)	80% emulsion 100-200g	Mist spraying once
				(1,000-500 times)	
Dimethoate	Medium	0.05 (0.05)	wheat, corn,	40% emulsion 100-125g	Mist spraying once
			sorghum 15 (10)		
		0.5 (1)	Vegetables 15 (9)	40% emulsion 50-100g	
		0.5 (1)	Apple 30 (7)	40% emulsion 1,500-	Mist spraying once
		0.5 (1)	Orange 20 (15)	1,000 times	Mist spraying once
				40% emulsion 1,500-	
		0.5 (1)	Tea 15 (7)	500 times	Mist spraying once
				40% emulsion 2,000-	
				1,000 times (125-175g)	Mist spraying once
Fenitrothion	Medium	1(5)	Paddy rice 20 (14)	50% emulsion 75-100 ml	Mist spraying once
		0.2 (0.5)	Tea 15 (100	50% emulsion 200-300g	
		0.2 (0.5)	Apple 30 (15)	50% emulsion 1,500-	Mist spraying once
				1,000 times	
					Mist spraying once
Malathion	Low	1 (3)	Paddy rice 15 (7)	50% emulsion 75-100g	Mist spraying once
		0.1 (0.3)	Tea 15 (10)	50% emulsion 150-300g	Mist spraying once
		Cannot be	Vegetables (cannot		
		detected	be used)		

GAIN Report #CH9010 Page 136 of 177

Phoxim	Low	0.05 (0.05)	Used for seed	50% emulsion 0.1-0.2	Seed application
			application of wheat	seeds amount	
			and corn		
		0.05 (0.05)	Not less than 10	50% emulsion 50-100 ml	Mist spraying once
			days for green	(2,000-500 times)	
			vegetables, white		
			cabbage and		
			cucumber (7)		
		0.05 (0.05)	Apples 30 (30)	50% emulsion 1,500-	Mist spraying once
				2,500 times	
		0.2 (0.5)	Tea 10 (6)	50% emulsion 200-	Mist spraying once
				300g, 1,000 times	
Trichlorphon	Low	0.05 (0.1)	Paddy rice 15 (7)	90% solid 100g	Mist spraying once
		0.1 (0.2)	Vegetables 10 (7-8)	90% solid 100g (1,000	Mist spraying once
				-500 times)	
		0.1 (0.2)	Citrus 25 (20)	90% solid 1,000-500	Mist spraying once
				times	

Note: The figures in the parenthesis of allowed final residue amount refer to state and international standards, similarly hereinafter.

The figures in the parenthesis of the interval between final application and date of harvest refer to state and international standards, similarly hereinafter.

## 1.2 Amino-based formate group pesticides

Name of	Acute	Allowed	Interval between final	Normal amount of	Methods of
pesticides	oral	final residue	application and date	preparation g/timesCmu	application and
	toxicity	(mg/kg)	of harvest (days)	or ml/timesC mu or	maximum times of
				dilution times	application
BPMC	Low	0.1 (0.3)	Paddy rice 30 (21)	50% emulsion 80-120 ml	Mist spraying once
Carbaryl	Medium	1 (5)	Paddy rice 40	8% powder 1,500-	Mist spraying once
			(northern) (30)	2,000g	
			Paddy rice 15	25% wettable powder	Mist spraying once
			(southern) (10)	200-250g	
Isoprocarb	Medium	0.1 (0.2)	Paddy rice 40 (30)	2% powder 1,500 g	Mist spraying once
MTMC	Medium	0.1 (0.2)	Paddy rice 30 (30)	25% wettable powder	Mist spraying once
				200-300g	

GAIN Report #CH9010 Page 137 of 177

Primicarb	Medium	0.5 (1)	Soybean 15 (10)	50% wettable powder	Mist spraying once
				10-16g	
		0.5 (1)	Leaf vegetable 10	50% wettable powder	Mist spraying once
			(6)	10-30g	
		0.05 (0.05,	Wheat 20 (14)	50% wettable powder	Mist spraying once
		wheat grain)		10-20g	
		0.1 (0.2,	Rapeseed 10 (4)	50% wettable powder	Mist spraying once
		vegetable		12-20g	
		seed)			

## 1.3 Pyrethrin group pesticides

Nome of	Acute	Allowed	Interval between final	Normal amount of	Methods of
Name of					
pesticides	oral	final	application and date	preparation g/timesCmu	application and
	toxicity	residue	of harvest (days)	or ml/timesC mu or	maximum times of
		(mg/kg)		dilution times	application
Cypermethrin	Medium	0.5 0.2	Leaf vegetables 7 (2-	10% emulsion 20-30ml	Mist spraying once
			5)	25% 12-16 ml	
		0.2(0.5)	Tomato 5 (1)	10% 20-30ml	Mist spraying once
		1(2)	Apple 30 (21)	10% emulsion 4,000-	Mist spraying once
				2,500 times	
				25%4000-500	
		1(2)	Orange (peaches) 15	10% emulsion 4,000-	Mist spraying once
			(7)	2,000 times	
		5 (20)	Tea 15 (7)	10% emulsion 6,000-	Mist spraying once
				3,000 times	
Deltamethrin	Medium	0.2(0.5)	Leaf vegetables 7 (2)	2.5% emulsion 20-40ml	Mist spraying once
			Apples 30 (5)	2.5% emulsion 2,500-	
		0.05(0.1)		1,250 times	Mist spraying once
			Orange 30 (28)	2.5% emulsion 2,500-	
		0.05(0.05)		1,250 times	Mist spraying once
			Tea 15 (5)	25% emulsion 1,500-	
		4(10)		800 times]	Mist spraying once
			Wheat 20 (15)	2.5% emulsion 10-15 ml	
		0.2(0.5)	Soybean 15 (7)	2.5% emulsion 15-25 ml	Mist spraying once
		0.1(0.1)			Mist spraying once.

GAIN Report #CH9010 Page 138 of 177

Fenvalerate	Medium	0.1(0.2)	Wheat 20 (15)	20% emulsion 20-5ml	Mist spraying once
		0.1(0.2)	Orange 30 (20)	20% emulsion 6,000-	Mist spraying once
				4,000 times	
		0.1(0.2)	Apple 30 (18)	20% emulsion 4,000-	Mist spraying once
				1,600 times	
		0.1(0.2)	Tea 15 (10)	20% emulsion 8,000-	Mist spraying once
				6,000 times	
		0.2(0.5)	Leaf vegetables	20% emulsion 15-40ml	Mist spraying once
			10,15 (5,12)		
		0.1(0.2)	Tomato 10 (3)	20% emulsion 30-40ml	Mist spraying once
		0.1(0.1)	Soybean 15 (10)	20% emulsion 10-40 ml	Mist spraying once

# 1.4 Other pesticides

Name of	Acute	Allowed	Interval between	Normal amount of	Methods of
pesticides	oral	final	final application and	preparation g/timesCmu	application and
	toxicity	residue	date of harvest	or ml/timesC mu or	maximum times of
		(mg/kg)	(days)	dilution times	application
Buprofezin	Low	0.2(0.3)	Paddy rice 20(14)	25% wettable powder	Mist spraying once
				25-35g	
Chlorfluazoron	Low	0.2(0.5)	Cabbage 12(7)	5% emulsion 40-80ml	Mist spraying once
Diflubenzuron	Low	0.2 (0.5)	Wheat 30(21)	25% wettable powder	Mist spraying once
				10-20g	
		0.5 (1.0)	Apple 30(21)	25% wettable powder	Mist spraying once
				2,000-1,000 times	
Mie-yu-niao	Low	1 (3.0)	Wheat 30(15)	25% suspending agent	Mist spraying once
				35-50ml	
Sha-chong-	Medium	0.1	Paddy rice 20(15)	17% water agent 250g	Mist spraying once
shuang		(0.2,rice)			

## 1.5 Acaricides

Name of	Acute	Allowed	Interval between	Normal amount of	Methods of
pesticides	oral	final	final application and	preparation g/timesCmu	application and
	toxicity	residue	date of harvest	or ml/timesC mu or	maximum times of
		(mg/kg)	(days)	dilution times	application
Amitraz	Low	0.2(0.4)	Apple40 (30)	20% emulsion 1,000	Mist spaying once
				times	
		0.2(0.5)	Orange 30 (21)	20% emulsion 1,500-	Mist spaying once
				1,000 times	
Hexythiazox	Low	0.2(0.5)	Apple 40 (30)	5% wettable powder	Mist spaying once
				2,000 times	
		0.2(0.5)	Orange 30 (30)	5% emulsion 2,000-	Mist spaying once
				1,500 times	

GAIN Report #CH9010 Page 139 of 177

Propargite	Low	2(5)	Apple 40(30)	73% emulsion 3,000-	Mist spaying once
				2,000 times	
		1(3)	Orange 30(30)	73% emulsion 3,000-	Mist spaying once
				2,000 times	

# 2. Organic germicides

## 2.1 Organic sulfur germicides

Name of	Acute	Allowed	Interval between	Normal amount of	Methods of
pesticides	oral	final	final application	preparation g/timesCmu or	application and
	toxicity	residue	and date of harvest	ml/timesC mu or dilution	maximum times of
		(mg/kg)	(days)	times	application
Thiram	Low	0.2(0.2,	Seed application	75% Thiram wettable	Seed application
		wheat	before the sowing	powder, containing	
		grain)	of spring wheat)	Thiram 37.5% (Carboxin	
				37.5) 2.5-2.8/kg seeds	

## 2.2 Substituted benzene group germicides

Name of	Acute	Allowed	Interval between	Normal amount of	Methods of
pesticides	oral	final	final application	preparation g/timesCmu or	application and
	toxicity	residue	and date of harvest	ml/timesC mu or dilution	maximum times of
		(mg/kg)	(days)	times	application
Chlorothalonil	Low	0.2(0.2)	Paddy rice15 (10)	75% wettable powder	Mist spaying once
				100g	
		1(1)	Tomato30(23)	75% wettable powder	Mist spaying once
				100-200g	
		0.1 (0.1,	Peanut 20(14)	75% wettable powder	Mist spaying once
		peanut)		100-160g	
		1(1)	Apple 30 (20)	75% wettable powder	Mist spaying once
				600 times	
		1(1)	Pear 30 (25)	75% wettable powder	Mist spaying once
				600 times	
		1(1)	Grape 30 (21)	75% wettable powder	Mist spaying once
				600 times	
Matalaxyl	Low	0.2(0.5)	Cucumber	50% wettable powder(?)	Mist spraying once
		0.5(1)	Grape	75-120g	
		0.05(0.05)	Grain seed	35% seed application	Dry or wet
			application	agent 200-300g for 100	application
				kg seeds	

GAIN Report #CH9010 Page 140 of 177

Thiophanate-	Low	0.1(0.1,	Paddy rice 35 (30)	50% suspending agent	Mist spraying once
methyl		rough rice)		100-150ml	
				70% wettable powder	Mist spraying once
				100-140g	
				70% wettable powder	Mist spraying once
				70-100g	
		0.1(0.1,	Wheat 35 (30)	50% suspending agent	Mist spraying once
		wheat		100-150ml	
		grain)			

# 2.3 Heterocyclic-nitrogen group fungicides

Name of	Acute	Allowed	Interval between	Normal amount of	Methods of
pesticides	oral	final	final application	preparation g/timesCmu or	application and
	toxicity	residue	and date of harvest	ml/timesC mu or dilution	maximum times of
		(mg/kg)	(days)	times	application
Carbendazim	Low	0.2(0.5,	Paddy rice 35 (30)	50% wettable powder	Mist spraying once
		rough rice)		50g	
		2(0.5,	Wheat 25(20)	50% wettable powder	Mist spraying once
		wheat		75-150g	
		grain)	Cucumber 10 (7)	25% wettable powder	Mist spraying once
		0.2(0.5)		1,000-500 times	
Carboxin	Low	0.2(0.2,	Seed application	75% thiram wettable	Seed application
		wheat	before sowing of	powder, containing	
		grain)	the spring wheat	37.5% of carboxin 2.5-	
				2.8/kg seeds	
Hymexazol	Low	0.5(0.5,	Used for treatment	30% water agent 3-6	From the sowing of
		rough rice)	of paddy rice	ml/m² seedbed	seedlings before
		0.5 (0.5,	seedbed or	70% wettable powder 4-	planting rice to the
		beet root)	treatment of seeds	7kg/kg seeds	seed application
			of paddy rice and		during the seedling
			beet root		stage
Iprodione	Low	10 (10,	Immersing bananas	25% suspending agent,	After immersing
		banana)		1,500 ppm	bananas for 2
					minutes, take them
					out, air dry and
		2 (10)	Apples 20(7)		store them.
				50% wettable powder	Mist spraying once
		0.2 (0.2,	Rapeseed 50(50)	1,500-1,000 times	
		rapeseed)		25% suspending agent	Mist spraying once
				140-200ml	
Isoprothiolane	Low	1 (2, rough	Early rice 20(14)	40% emulsion or wettable	Mist spraying once
		rice)	Late rice 35(28)	powder 70-100g	
					Mist spraying once

GAIN Report #CH9010 Page 141 of 177

Procymidone	Low	1 (2,	Rapeseed 30(25)	50% wettable powder	Mist spraying once
		rapeseed)		30-50 g	
		1 (2)	Cucumber 5(1)	50% wettable powder	Mist spraying once
				40-50 g	
Thiabendazole	Low	10 (10,	Immersing fruit	45% suspending agent	After immersing
		citrus)		450 times	them for one minute,
			Immersing fruit	45% suspending agent	take them out, air
		0.4 (0.4,		900-600 times	dry and store them.
		flesh of			
		bananas)			
Triadimefon	Low	0.2(0.5,	Wheat 40(30)	25% wettable powder	Mist spraying once
		wheat		35-60g	
		grain)	Apple, chili,		
		0.1(0.2)	tomato,		
			grape	20% wettable powder	Mist spraying once
		0.1(0.2)	cucumber 7-10	1,000-500 times	
		0.1(0.2)	(5)		
Tricyclazole	Medium	1(2, rough	Paddy rice 30(21)	70% wettable powder	Mist spraying once
		rice)		20-30g	

## 3. Herbicides

## 3.1 Phenoxy carboxylic acid herbicides

Name of	Acute	Allowed final	Interval between final	Normal amount of	Methods of
pesticides	oral	residue	application and date	preparation g/timesCmu	application and
	toxicity	(mg/kg)	of harvest (days)	or ml/timesC mu or	maximum times of
				dilution times	application
Diclofop-	Low	0.1 (wheat	Applying them when	36%	Mist spraying once
methyl		grain)	wild oat at 3-5 leaf	emulsion 130-170ml	
			stage,		
		0.1 (beet	weeds 2-4 leaf stage	36% emulsion 130-200	Mist spraying once
		root)		ml	
Fluozifop-	Low	1 (soybean	Applying them when	35% emulsion 30-	Mist spraying once
butyl		seed)	the crops are at	100ml	
		1 (peanut	seedling stage and	35% emulsion 50-	Mist spraying once
		kernel)	weeds at 3-5 leaf	100ml	
			stage		

GAIN Report #CH9010 Page 142 of 177

Fluozifop-p-	Low	0.1 (soybean	Applying them when	15% emulsion 50-60ml	Mist spraying once
butyl		seed)	the crops are at		
			seedling stage and		
			weeds at 3-5 leaf		
		0.1 (peanut	stage	15% emulsion 50-	Mist spraying once
		kernel)	Applying them when	100ml	
			rapeseed is at seedling		
			stage and weeds at 1-		
		0.1	4 leaf stage	15% emulsion 30-40ml	Mist spraying once
		(rapeseed)	Applying them when	15% emulsion 50-65 ml	Mist spraying once
		0.1 (beet)	beet is at seedling		
			stage and weeds at 3-		
			5 leaf stage		
Quizolofop-	Low	0.1 (soybean	Soybean 1-4 leaves	10% emulsion 65-85ml	Mist spraying once
ethyl		seed)	compound leaf stage		
		0.2 (beet	Beet 4-5 leaf stage	10% emulsion 65-85ml	Mist spraying once
		root)			

## 3.2 Benzoic acid herbicides

Name of pesticides	Acute oral toxicity	Allowed final residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesCmu or ml/timesC mu or dilution times	Methods of application and maximum times of application
Dicamba	Low	0.5 (wheat grain)	From the 3-leaf stage of wheat to the end of tillering stage	48% water agent 20-5 ml	Mist spraying once
		0.5 (corn)	Corn 4-6 leaf stage	48% water agent 25- 40ml	Mist spraying once

# 3.3 Benzyl ether herbicides

Name of pesticides	Acute oral toxicity	Allowed final residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesCmu or ml/timesC mu or	Methods of application and maximum times of
	-		-	dilution times	application
Acifluorfen sodium	Low	0.1 (soybean seed)	Eliminating broad-leaf weeds in soybean and peanut fields, application when weeds are at 1-4 leaf stage after sowing of soybeans	24% water agent 60- 100ml	Mist spraying once

GAIN Report #CH9010 Page 143 of 177

Fomesafen	Low	0.05	1-3 compound leaf	25% water agent 65-	Mist spraying once
		(soybean	after leaf sprouting of	130ml	
		seed)	soybean, weeds at 2-		
			5 leaf stages		
Oxyiluorfen	Low	0.05 (coarse	5-7 days after planting	23.5% emulsion 10-35	Mist spraying once
		rice)	of rice seedlings,	ml	
			spraying after mixing it		
			with fine soil 10-15 kg		

Note: The allowed final residue in the table of herbicides is the same as that of our state.

## 3.4 Acetamide-group herbicides

Name of pesticides	Acute oral toxicity	Allowed final residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesCmu or ml/timesC mu or dilution times	Methods of application and maximum times of application
Butachlor	Low	0.5 (coarse rice)	2-3 days before planting of rice seedling or 4-5 days after planting of seedlings	60% emulsion 85-140ml 5% grian agent 1,000- 1,600g	Mist spraying or spreading pesticide- clay mixture pesticide-clay mixture
Metotachlor	Low	0.1 (soybean seed)  0.5 (peanut kernel)	Application before soybean sprouts, Avoid using it in regions that have plenty of precipitation, where the earth is sandy and which have high level of underground water Mist spraying to soil before and after sowing of peanut.	72% emulsion 25-75g 72% emulsion 100- 150ml	Mist spraying once

## 3.5 Carbamate herbicides and sulphocarbamate herbicides

Name of	Acute	Allowed final	Interval between final	Normal amount of	Methods of
pesticides	oral	residue	application and date	preparation g/timesCmu	application and
	toxicity	(mg/kg)	of harvest (days)	or ml/timesC mu or	maximum times of
				dilution times	application

GAIN Report #CH9010 Page 144 of 177

Thiobencarb	Low	0.2 (coarse	Mist spraying or	50% emulsion 330-	Mist spraying once
		rice)	pesticide-clay	500ml	
			mixture once in	High content thiobencarb	Mist spraying once
			seedling field or 5-7	90% emulsion 150-	
			days before or after	220ml	
			planting of seedling		
Triallate	Low	0.05 (wheat	5-7 days before	40% emulsion 150-	Mist spraying once
		grain)	sowing of spring	200ml	
			wheat and mixing of		
			soil		
Vernolate	Low	0.1 (soybean	Application once to	88.5% emulsion 170-	Mist spraying once
		grain)	soil before sowing,	225ml	
			covering earth 507		
			centimeters		

# 3.6 Trizine herbicides

Name of	Acute	Allowed final	Interval between final	Normal amount of	Methods of
pesticides	oral	residue	application and date	preparation g/timesCmu	application and
	toxicity	(mg/kg)	of harvest (days)	or ml/timesC mu or	maximum times of
				dilution times	application
Metribuzin	Low	0.1 (soybean	Application to soil	70% wettable powder	Mist spraying once
		seed)	before and after	25-75g	
			sowing		
Simetryne	Low	0.02 (rough	Treatment of soil	25% wettable soil 100-	Mist spraying or
		rice)	before sowing	200g	pesticide-clay
					mixture

# 3.7 Sulfonyolurea herbicides

Name of pesticides	Acute oral toxicity	Allowed final residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesCmu or ml/timesC mu or dilution times	Methods of application and maximum times of application
Bensulfuron- methyl	Low	0.02 (coarse rice)	Application 5-7 days before planting of seedlings and preserving water for one week	10% wettable powder 13-25g	Mist spraying once

# 3.8 Other herbicides

GAIN Report #CH9010 Page 145 of 177

Quaternary ammonium salt herbicides	Name of pesticides  Paraquat	Acute oral toxicity  Medium	Allowed final residue (mg/kg)  1 (orange, whole fruit)	Interval between final application and date of harvest (days)  Application very low when weeds grow thick and avoid application	Normal amount of preparation g/timesCmu or ml/timesC mu or dilution times 20% water agent 200-300ml	Methods of application and maximum times of application  Mist spraying once
Cyclohexee ketone herbicides	Sethaxydim	Low	2 (soybean seed) 2 (peanut kernel) 1 (rapeseed, lintseed) 5 (cottonseed) 0.5 (beet)	to orange trees  During the seedling period of crops, application at 3-5 leaf period of annual grass family weed	20% emulsion 60-100ml 12.5% oil emulsion 65- 100ml 20% emulsion 65-120ml 20% emulsion 85-100 ml 20% emulsion 100-150ml	Mist spraying once
Dinitroaniline herbicides	pendimethalin	Low	0.1(corn seed) 0.2 (leaf vegetable) (peanut)	Mist spraying to soil 5 days after sowing of corn or before seeds sprout Mist spraying to soil before transplanting of leaf vegetables and raking even after application Application after sowing of peanut or before seeds sprout.	33% emulsion 150-200ml 33% emulsion 100-150ml	Mist spraying once Mist spraying once
Dinitroaniline herbicides	Trifluralin	Low	0.01(corn seed) 0.01(soy bean seed)	Application to soil before sowing of corn and soybean, than raking even afterwards	48% emulsion 75-100ml 48% emulsion 125-175 ml	Mist spraying once Mist spraying once

GAIN Report #CH9010 Page 146 of 177

Heterocyclic nitrogen-group herbicides	Bentazone	Low	0.05(coarse rice)	Application once 20-30 days after planting of	48% liquid150- 200ml	Mist spraying once
nervicides				seedlings and preventing annual	200111	
			0.05(soy	broad leaf weeds		Mist spraying
			bean seed)	and nutgrass	48%	once
				flatsedge	liquid160-	
				Application once	200ml	
				when soybean at		
				2-3 compound		
		_		leaves stage		
	Oxadiazon	Low	0.05(coarse	Application when	25% emulsion,	Mist spraying
			rice)	turning green	165-230ml per	once
			0.2(rice	after sowing	mu for northern	
			straw)		dry land and 65-100ml for	
			0.3(peanut kernel)	Application	southern seed	Mist spraying
			Kerrier)	before seeds	planting	Mist spraying once
				sprout	25% emulsion	once
				sprout	100-150ml	
Imidazoline	Pursuit	Low	(soybean	Treatment of	5% water 100-	
ketone	Imazethaphr		seed)	mixing soil before	134ml	
herbicides				sowing of		Mist spraying
				soybean;		once
				treatment of soil		
				before or after		
				seeds sprout		
				after sowing		
	Difenzoquat	Low	0.05(wheat	Application once	64% wettable	Mist spraying
			grain)	when wild oat is	powder 5-	once
				at 3-5 leaf stage	150g, added	
					with water 50l	

# Additional descriptions:

This standard is proposed by the China Green Food Development Center .

This standard is drafted by the Beijing University of Agriculture and Institute of Inspection and Testing of Pesticides under the Ministry of Agriculture

Chief drafters of this standard are: Qian Chuanfan, Shen Jizhong, Li Benchang

# ANX VI.2 CLASSIFICATION OF SOFT DRINKS (GB 10789-1996)

### **Foreword**

GAIN Report #CH9010 Page 147 of 177

With the rapid development of beverage industry the technical content of standard GB10789-89"Classification of soft drinks"can no longer meet the requirements of current production. Therefore, amendments are made according to developing situation in recent years. Two new categories of tea drinks and specific drinks are incorporated on the basis of former soft drink classification. The content of former eight categories are also properly amended by reference to domestic realistic situation, relevant regulations of Food and Drug Administration (FDA) of U.S.A., as well as relevant standards of Codex Alimentary Commission (CAC).

To be enforced starting on September 1, 1998.

Upon its enforcement, this standard will supersede GB 10789-89.

The standard is proposed by China National Council of Light Industry.

The standard is technically appointed to National Food and Fermentation Standardization Center.

The Standard is drafted by China National Institute of Food and Fermentation Industries, and Guangdong Apollo (Group) Co. Ltd.

The main drafters of this standard are Xu Qingqu, Jiang Yonghuang, Gong Lingdi, Huo Xiuyan, Xian Xuefen.

The Standard is to be explained by National Food and Fermentation Standardization Center commissioned by State Bureau of Technical Supervision of the People's Republic of China.

#### 1 Scope

The standard provides the categories, definitions, and types of soft drinks (also under the name of non-alcoholic drinks).

The standard applies to packaged beverage products with alcohol content less than 0.5% (m/V).

### 2 Principle of classification

Classification is made according to characteristics of raw materials or final products.

### 3 Categories, definitions and types

#### 3.1 Carbonated drinks

### 3.1.1 Definition

3.1.1.1 It means products carbonated in a specific condition, not including beverages containing self-fermented carbon dioxide gas. The carbon dioxide content in final products, expressed as ratio of gas volume at 20°C to volume of products, shall not be less than 2.0.

### **3.1.2** Types

GAIN Report #CH9010 Page 148 of 177

# 3.1.2.1 Fruit juice type

It means carbonated drinks with single-strength fruit juice in quantity not less than 2.5%, such as tangerine juice carbonated drink, orange juice carbonated drink, pineapple juice carbonated drink, or mixed fruit juice carbonated drink.

### 3.1.2.2 Fruit flavoured type

It means carbonated drinks with single-strength fruit juice in quantity less than 2.5%, and with fruit—type edible essence being used as flavouring agent, such as orange-flavoured carbonated drink, lemon flavoured carbonated drink.

### 3.1.2.3 Cola type

It means carbonated drinks containing caramel, cola essence or mixed-type essence resembling the aroma of both kola nut and fruits. Products of colorless cola contain no caramel.

# 3.1.2.4 Low-calorie type

It means soda water and types of carbonated drinks with sweetener partially or totally substituted for sugar. The calorific value of the final products shall be less than 75kJ/100mL.

# 3.1.2.5 Other types

It means carbonated drinks containing plant extracts or non-fruit type edible essence as aroma enhancer, and/or being able to provide energy and electrolytes consumed during sports, such as ginger ale, sarsaparilla carbonated drinks, sports carbonated drink, etc..

### 3.2 Fruit juice (pulps) and drinks

### 3.2.1 Definition

It means products processed from fresh fruits or cold-stored fruits.

### **3.2.2** Types

# 3.2.2.1 Fruit juices

- a) It means fermentable but unfermented juice obtained from fruits by mechanical process, having the characteristic color, flavour, and soluble solids content of fruit from which it comes.
- b) It means juice extracted from fruits by steeping or percolation followed by physically removal of added water, having the characteristic color, flavour, and soluble solids content of fruit from which it comes.
- c) It means products obtained from concentrated juice by reconstitution of the same amount of water removed from the juice when it was concentrated, having the characteristic color, flavour, and soluble solids content typical of the fruit from which it comes.

Products containing two or more kinds of fruit juice are named mixed juice.

### 3.2.2.2 Fruit pulps

a) It means the fermentable but unfermented pulp obtained from fruits or edible parts of fruits by pulping process, having the characteristic color, flavour, and soluble solids content of fruit from which it comes.

GAIN Report #CH9010 Page 149 of 177

b) It means products obtained from concentrated pulp by reconstitution of the same amount of water removed from the pulp when it was concentrated, having the characteristic color, flavour, and soluble solids content of fruit from which it comes.

### 3.2.2.3 Concentrated juices

It means products obtained from fruit juices by physically removing a specific proportion of water thereof, having the characteristics of fruit juices.

### 3.2.2.4 Concentrated pulps

It means products obtained from fruit pulps by physically removing a specific proportion of water thereof, having the characteristics of fruit pulps.

#### 3.2.2.5 Nectars

It means products made from pulps (or concentrated pulps) by addition of water, syrup, edible acid, etc.. The pulp content shall not be less than 30% (m/V) in general and shall not be less than 20% (m/V) in particular for products made from fruits which possess high acidity, low juice content, high pulp content, or intense flavour.

Nectars containing two or more kinds of pulp are named mixed nectars.

#### 3.2.2.6 Juice drinks

It means turbid or clear products obtained from juice (or concentrated juice) by addition of water, syrup, edible acid, etc. The final products shall contain juice not less than 10% (m/v) such as orange fruit drink, pineapple fruit drink and apple fruit drink.

Juice drinks containing two or more kinds of juice are named mixed juice drinks.

#### 3.2.2.7 Juice drinks with granules

It means products obtained from juice (or concentrated juice) by addition of water, citrus sacs (or granules from other fruits), syrup, edible acid, etc.. The final products shall contain juice not less than 10% (m/V) and sacs or granules not less than 5% (m/V).

### 3.2.2.8 Fruit drink concentrates

It means products obtained from juice (or concentrated juice) by addition of water, syrup, edible acid, etc., containing high content of sugar, being intended for consumption after dilution. The final products, such as passion fruit concentrates, etc., shall contain juice not less than 5% (m/V) multiplying the labeled dilution factor.

Fruit drink concentrates containing two or more kinds of juice are named mixed fruit drink concentrates.

#### 3.2.2.9 Fruit drinks

It means turbid or clear products obtained from juice (or concentrated juice) by addition of water, syrup, edible acid, etc.. The final products shall contain juice not less than 5% (m/V), such as orange drink, pineapple drink and apple dink, etc.

### 3.3 Vegetable juices and drinks

### 3.3.1 Definition

It means products made from fresh vegetable preserved in cold storage (including edible roots, stalks, leaves, flowers

GAIN Report #CH9010 Page 150 of 177

and fruits, edible fungi, edible algae and pteridophyte).

# **3.3.2** Types

## 3.3.2.1 Vegetable juices

It means products obtained by addition of common salt or syrup to the juice which is physically processed from vegetables, such as tomato juice.

# 3.3.2.2 Vegetable juice drinks

It means products obtained from vegetable juices by addition of water, syrup, edible acid, etc., which is ready to drink. The type containing two or more kinds of vegetable juices is named mixed vegetable juice drink.

# 3.3.2.3 Fruit vegetable juice

It means products obtained from vegetable juice combined with fruit juice by addition of sugar and other ingredients.

# 3.3.2.4 Fermented vegetable juice drinks

It means products obtained from lactic-fermented preparations of vegetables or vegetable juices by adding water, syrup, common salt, etc..

### 3.3.2.5 Edible fungi drinks

- a) It means products obtained by addition of water, syrup, edible acid, etc. to the extracted juices or extracted preparations of fruiting body of edible fungi.
- b) It means products obtained by addition of water, syrup, edible acid, etc. to the fermented broth which is prepared by submerged fermentation on nontoxic, edible medium inoculated with edible fungi strain.

### 3.3.2.6 Algae drinks

It means products obtained by addition of water, syrup, edible acid, etc. to the liquid prepared by technologies of steeping, fermentation, or enzymatic hydrolysis of sea algae or cultivated algae, such as spirulina drinks.

### 3.3.2.7 Pteridophyte drinks

It means products obtained from edible pteridophyte (such as from tender leaves of pteridophyte).

## 3.4 Drinks containing milk

### 3.4.1 Definition

It means products processed from raw materials of fresh milk or diary products (fermented or unfermented).

### **3.4.2** Types

#### 3.4.2.1 Formulated milk drinks

It means products obtained from raw materials of fresh milk or diary products by addition of water, syrup, edible acid, etc.. The final products are named milk drinks when protein content thereof is not less 1.0% (m/V) while final products containing protein less than 1.0% (m/V) but up to or higher than 0.7% (m/V) shall be named lactic acid drinks.

GAIN Report #CH9010 Page 151 of 177

#### 3.4.2.2 Fermented milk drinks

It means products obtained by water, syrup to the fermented milk which is processed by inoculation and lactic acid fermentation on raw material of fresh milk or dairy products. The final products containing protein less than 1.0% (m/V) are named lactic strain milk drinks while final products containing protein less than 1.0% (m/V) but up to or higher than 0.7% (m/V) shall be named lactic strain drinks.

### 3.5 Vegetable protein drinks

### 3.5.1 Definition

It means products obtained by utilizing high-protein fruits, seeds, drupe kernels, or nuts of plant origin as raw materials. Protein content in final products shall be not less than 0.5% (m/V).

# **3.5.2** Types

## 3.5.2.1 Soya bean drinks

It means products obtained by adding (or not) water, syrup etc. to soy milk which is processed by grinding, extracting, deodorizing, etc., such as plain soy milk, flavoured soy milk drinks, soy milk drinks.

# 3.5.2.2 Coconut milky drinks

It means products obtained by addition of water, syrup etc. to coconut pulp prepared from separated flesh of fresh coconut of appropriate ripeness.

## 3.5.2.3 Apricot kernel milky drinks

It means products obtained by addition of water, syrup etc. to apricot kernel paste which is prepared by soaking, grinding, etc..

### 3.5.2.4 Other vegetable protein drinks

It means products obtained by addition of water, syrup etc. to the emulsion processed from raw materials of walnut kernel, peanut, pumpkin seed, sunflower seed, etc., by grinding and other technologies.

#### 3.6 Bottled water

### 3.6.1 Definition

It means water ready to drink, sealed hermetically in plastic bottles, glass bottles or other containers and containing none of additives.

### **3.6.2** Types

### 3.6.2.1 Natural mineral water

It means unpolluted underground water which flows not naturally from deep underground or is revealed artificially, containing a specific amount of minerals, trace elements or gas of carbon dioxide; the chemical composition, volume flow rate and temperature of the water in question being relatively stable in a naturally fluctuating range. The carbonation is permitted.

GAIN Report #CH9010 Page 152 of 177

#### 3.6.2.2 Pure water

It means purified water obtained by methods of distillation, electro-dialysis, ion-exchange, reverse-osmosis and other suitable processes to remove minerals, organic compounds, toxic substances and microbes in water source which conforms to hygiene standard of drinking water.

#### 3.6.2.3 Other waters

It means waters processed from water sources which conform to the hygiene standards of drinking water, including spring water originating from underground and flowing up to earth surface, spring water gushing from natural reservoir of a higher level than natural water level, or deep well water, etc..

#### 3.7 Tea drinks

### 3.7.1 Definition

It means either tea extracts obtained by technologies of extraction, filtration, clarification, etc. after steeping tea with water, or products obtained from tea extracts by addition of water, syrup, edible acid, edible essence, fruit juice or herb (or cereal)extracts.

### **3.7.2** Types

#### 3.7.2.1 Tea

It means products obtained by filling tea extracts (or concentrates)into containers.

## 3.7.2.2 Tea with fruit juice

It means products obtained from tea preparations by addition of water, single-strength fruit juice (or concentrated juice), syrup, edible, etc.. Single-strength juice content in final products shall not be less than 5.0% (m/V).

#### 3.7.2.3 Fruit flavoured tea

It means products obtained from tea preparation by addition of water, edible essence, syrup, edible acid, etc..

### 3.7.2.4 Other tea drinks

It means products obtained from tea preparation by addition of herb (or cereal) extracts, syrup, edible acid, etc..

### 3.8 Powdered drinks

#### 3.8.1 Definition

It means products, either powdered, granulated, or cubed, which are processed from raw materials of sugar, food additive, fruit juice or vegetable extracts, etc.. Water content in final products shall not be greater than 5% (m/V).

# **3.8.2** Types

# 3.8.2.1 Fruit flavoured type

It means products processed by using sugar, fruit juice, nutrition enhancers, edible essence, or coloring agent as raw materials, the water solution of final products possessing typical color, aroma, and flavour under the brand name.

GAIN Report #CH9010 Page 153 of 177

# 3.8.2.2 Protein type

It means products by using sugar, dairy products, egg powder, vegetable protein or nutrition enhancers as raw materials.

### 3.8.2.3 Other types

- a) It means products obtained by incorporating coffee, cocoa, dairy products, essence, etc. with sugar as the major ingredient.
- b) It means products obtained from tea, chrysanthemum, and Imperata cylindrica roots, etc. by processes of extracting, concentrating, mixing with or without sugar.
- c) It means products obtained from raw materials of edible filler by encapsulating coffee (or other vegetable) extracts, as well as other food additives.

### 3.9 Specific drinks

#### 3.9.1 Definition

It means products obtained by adjusting compositions of natural nutrients contents in drinks to meet specific nutritional needs of certain consumers.

# **3.9.2** Types

### 3.9.2.1 Sports drinks

It means products with nutrients in their compositions and quantity being able to meet the special nutritional needs and sports physiological requirements of athletes or people on physical training, as well as being able to enhance sports performance.

#### 3.9.2.2 Fortified drinks

It means products with appropriate amounts of food nutrition enhancers being incorporated to provide special nutritional needs of some people.

### 3.9.2.3 Others

It means products prepared to meet the needs of certain consumers, such as low-calorie drinks.

#### 3.10 Other drinks

#### 3.10.1 Definition

It means soft drinks other than nine types of drinks defined above.

### **3.10.2** Types

#### 3.10.2.1 Fruit flavoured drinks

It means products which are obtained from syrup by addition of edible essence, vegetable extracts, edible acid, sweetener, etc., being ready to drink and with single-strength fruit juice content less than 5% (m/V), such as orange

GAIN Report #CH9010 Page 154 of 177

flavoured drink and lemon flavoured drink, etc.. Concentrated products of fruit flavoured drinks are intended for consumption after dilution.

# 3.10.2.2 Plant drinks of non-fruit (non-vegetable)

It means products obtained by processing roots, stems, leaves, flower, seeds of non-fruit (non-vegetable), as well as secretion from tissue of bamboo and other specific trees.

### 3.10.2.3 Other water drinks

- a) It means water obtained from water source which conforms to the hygiene standard of drinking water by process of, with or without purifying, adding or letting flowing through a particular apparatus to ensure the water in question containing a specific amount of beneficial trace elements or minerals.
- b) It means natural mineral water by adding other ingredients.

### 3.10.2.4 Others

It means products obtained by processing raw materials of new food resources of resources suitable for both food and medicine.

GAIN Report #CH9010 Page 155 of 177

## ANX VI.3 GENERAL STANDARD FOR HEALTH (FUNCTIONAL) FOODS (GB 16740-1997)

### Foreword

Health (functional) foods in China can be traced back originally and historically to remote antiquity. Traditional Chinese health diet and medicated foods have been used over a period of several thousand years. In recent years, many health (functional) foods have been rapidly developed and entered into the market. The purpose of this standard is to rectify and formalize the manufacture of health (functional) foods, to provide guidelines for governing of the market, to defend the right of manufacturers, and to safeguard the consumers' interest.

This standard provides the hygiene requirements (the Clause 6.5) according to "Hygiene Requirements of Health Foods" issued by the department of hygienic administration under the State Council.

This standard provides the requirements for the labeling according to GB7718-94 "General standard for the labeling of foods" and GB13432-92 "Labeling of foods for special nutrient", with the reference of "Health foods labeling & labeling content and requirements of product description" issued by the department of hygienic administration under the State Council. In view of the special features of health (functional) foods, the additional labeling requirements are included.

As of the date into force of this standard, the enterprise standard established by the health (functional) food manufacturer and filed in the Local Bureau of Technical Supervision shall comply with this standard.

This Standard is proposed by the China National Food Industry Standardization Committee of Technique.

This Standard is technically appointed to the China National Food Industry Standardization Committee of Technique.

This Standard is prepared by the drafting group of the China National Bee Product Quality Supervision Testing Center, China Agriculture University, China National Research Institute of Food and Fermentation Industries, Technique Committee of China National Health foods Association, and China National Food Industry Standardization Committee of Technique.

The principal drafters of this standard are Hao Yu, Li Zijian, Cai Tongyi, Chen Xiangkui; and the co-drafter are Lin Linan, Yang Xiaoming.

## 1 Scope

This standard provides the definitions, general principals, technical requirements, testing methods, and labeling requirements for health (functional) foods.

This standard applies to the health (functional) foods manufactured and/or sold within the People's Republic of China.

#### 2 References

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent of the

GAIN Report #CH9010 Page 156 of 177

standards listed below.

GB 2760-1996	Hygienic standards for uses of food additives
GB 4789.2-94	Microbiological examination of food hygiene - Detection of aerobic bacterial count
GB 4789.3-94	Microbiological examination of food hygiene - Detection of Coliform bacteria
GB 4789.4-94	Microbiological examination of food hygiene - Examination of Salmonella
GB 4789.5-94	Microbiological examination of food hygiene - Examination of Shigella
GB 44789.10-94	Microbiological examination of food hygiene - Examination of Staphylococcus aureus
GB 4789.11-94	Microbiological examination of food hygiene - Examination of Streptococcus hemolyticus
GB 4789.15-94	Microbiological examination of food hygiene - Enumeration of molds and yeasts
GB/T 5009.11-1996	Method for determination of total arsenic in foods
GB/T 5009.12-1996	Method for determination of lead in foods
GB/T 5009.17-1996	Method for determination of total mercury in foods
GB 7718-94	General standard for labeling of foods
GB 13432-92	Labeling of foods for special nutrient
GB 14880-94	Hygienic standard for the use of nutritional fortification substances in foods
GB 14881-94	General hygienic regulation for food enterprises
GB 14882-94	Limited concentrations of radioactive materials in foods
GB 15266-94	Sport drinks

### 3 Definition of terms

For the purpose of this standard:

### 3.1 Health (functional) food

It means any food possessing the general nature of foods, being able to regulate functions of human body and suitable for specific consumer groups, but without any intention for therapeutic purpose.

### 3.2 Functional component

It means any substance being able to regulate functions of human body by activating enzyme activities or other means. Currently, the following substances are mainly included:

- Polysaccharides, such as dietary fiber, and lentinan;
- Functional sweeteners, such as mono-saccharide, oligose, and poly-glycitol;
- Functional fats (fatty acid), such as poly-unsaturated fatty acid, phospholipid, and choline;
- Free radical scavengers, such as super oxide dismutase (SOD), and glutathione peroxidase;
- Vitamins, such as vitamin A, vitamin E, and vitamin C;
- Peptides and proteins, such as glutathione, and immunoglobulin;
- Active bacteria, such as lactobacillus, and bifid bacterium;
- Trace-elements, such as selenium, and zinc;
- Others, such as octacosyl alcohol, phytosterol, and saponin.

### 4 Classification of product

Health (functional) foods are classified according to their human body regulating functions as follows: regulating the

GAIN Report #CH9010 Page 157 of 177

immune system, delaying senility, memory improvement, growth improvement, anti-stamina, weight control, improvement of oxygen-deficiency tolerance, improving radiation resistance, anti-mutation and tumor inhibition, blood lipid regulation, libido improvement, blood sugar regulation, etc.

### **5** General principles

- 5.1 Health (functional) foods shall not cause any acute, sub-acute or chronic harm to human body.
- 5.2 Health (functional) foods shall be evaluated scientifically by qualitative and quantitative analysis of composition and functional testing with animal or human groups, and proven containing effective functional components and having remarkable and stable body function regulation. Alternatively they shall pass animal (human) group tests and be demonstrated to play a remarkable and stable role in body function regulation.
- 5.3 The formulation and manufacturing technology of health (functional) foods shall be scientifically sound.
- 5.4 Manufacturers of health (functional) foods shall conform to GB 14881-94, establish and improve their quality assurance system in steps.

## **6** Technical requirements

# 6.1 Raw materials and supplementary ingredients

- 6.1.1 Raw materials and supplementary ingredients: They shall comply with the corresponding national standards of trade standards or the relevant regulations.
- 6.1.2 Food additives: They shall comply with the corresponding national standards of trade standards.
- 6.1.3 Residue of pesticides, veterinary drugs, and biological toxins: The limits of them shall comply with the corresponding national standards.
- 6.1.4 Residue of radioactive substances: The limits of them shall comply with GB 14882-94.

# **6.2** Appearance and organoleptic properties

Any health (functional) food shall have the typical appearance, color, odor, taste, and texture of its kind, but without any unpleasant and unacceptable odor and taste.

### **6.3** Functional requirement

Any health (functional) food shall have at least one of those functions regulating human body.

# 6.4 Physico-chemical requirements

#### 6.4.1 Net content

The difference between the net content of the unit package and the mass or volume marked on the label shall not exceed the negative deviation (Table 1).

GAIN Report #CH9010 Page 158 of 177

Table 1: Negative deviation for net content per unit package

Net content	Negative deviation	
Q	Percentage of Q	g or mL
5g ~ 50g 5mL ~ 50mL	9	-
50g ~ 100g 50mL ~ 100mL	-	4.5
100g ~ 200g 100mL ~ 200mL	4.5	-
200g ~ 300g 200mL ~ 300mL	-	9
300g ~ 500g 300mL ~ 500mL	3	-
500g ~ 1kg 500mL ~ 1L	-	15
1kg ~ 10kg 1L ~ 10L	1.5	-

### 6.4.2 Functional component

Health (functional) food shall commonly contain the corresponding functional component with its minimum effective content. If necessary, the effective content shall be also controlled within the range from the minimum to maximum limits.

# 6.4.3 Nutrients

Health (functional) food shall also contain the typical nutrients of its kind besides complying with the Clause 6.4.2.

### 6.4.4 Adding quantity of food additives and nutritional fortification substances

Health (functional) food shall comply with the requirements for the dosage of food additives and nutritional fortification substances in GB 2760 and GB 14880.

Health (functional) food for infant and pregnant (lactating) women shall not contain any stimulant and hormone. Health (functional) food for athletes shall not contain any prohibited drug as designated in GB 15266.

### 6.5 Hygiene requirements

## 6.5.1 The limit of harmful metals and harmful substances

Health (functional) food shall comply with the limit of its kind in the requirements of the national hygiene standards. For that which does not have the typical limit of its kind in the national standard, the limits of lead, arsenic and mercury shall

GAIN Report #CH9010 Page 159 of 177

comply with Table 2.

Table 2: The limits of lead, arsenic and mercury

Item	Allowable Limits	
	General product	Specific product
Lead, mg/kg #	0.5	1.5 for the capsules; 2.0 for the solid beverage and capsules containing algae or tea.
Arsenic, mg/kg #	0.3	1.0 for the solid beverage containing algae or tea and all the capsules.
Mercury, mg/kg #	-	0.3 for the solid beverage containing algae or tea and all the capsules.

### 6.5.2 Limit of microbial load

Health (functional) food shall comply with the limit of its kind in the requirements of the national hygiene standard. For that which does not have the typical limit of its kind in the national standard, the microbial load limits shall comply with Table 3 based on the physical state of product.

**Table 3: Limits of microbe** 

		Limits		
Item	Liquid		Solid or semi -	solid
	Protein \$1.0%	Protein < 1.0%	Protein \$4.0%	Protein < 4.0%
Total bacterial count, cfu/g or mL #	1,000	100	30,000	1,000
Coliform, MPN/100g or 100mL #	40	6	90	40
Mold, cfu/g or mL #	10	10	25	25
Yeast, cfu/g or mL #	10	10	25	25
Pathogen (enteropathogenic bacteria and pathogenic coccus)		No detected		

# 7 Test and analysis method

GAIN Report #CH9010 Page 160 of 177

## 7.1 Nutrient and functional component

According to the methods provided in the corresponding national, and trade standards or the methods approved by the authorized organization.

#### 7.2 Stimulant and hormone

According to the methods provided in the corresponding national, and trade standards or methods approved by authorized organization.

#### **7.3** Lead

According to GB/T 5009.12.

#### 7.4 Arsenic

According to GB/T 5009.11.

## 7.5 Mercury

According to GB/T 5009.17.

### 7.6 Total bacteria count

According to GB 4789.2.

#### 7.7 Coliform

According to GB 4789.3

### 7.8 Mold and yeast

According to GB 4789.15.

# 7.9 Pathogen

According to GB 4789.4, GB 4789.5, and GB 4789.11.

### 8 Labeling

The following information shall be declared on any label of the prepackaged health (functional) food, ready to offer to the consumer, manufactured locally and imported:

### 8.1 Name of health (functional) food

- 8.1.1 The name shall indicate the true nature of the food and normally to specific according to the Clauses 5.1 and 8.4 in GB 7718-94. A "coined" "fanciful" "brand" or "trade mark" name may be used provided it accompanies the specific name indicating the true nature of such food, or the functional name approved, such as the delaying senility, weight control, and anti-stamina foods.
- 8.1.2 The product shall be named as neither a pharmaceutical or resembled pharmaceutical name, nor the abbreviation of a foreign name, code name or Chinese Phonetic Alphabet name.

GAIN Report #CH9010 Page 161 of 177

## **8.2** Ingredient list (Ingredients)

The ingredients shall be declared according to the Clause 5.2 in GB7718. Food additives and nutritional fortification substances shall be declared with their specific name according to GB 2760 and GB 14880.

# **8.3** Table of functional and nutritional components

- 8.3.1 The quantity of the main and supplementary functional ingredients shall be tabulated as per 100g or 100mg (in g, mg, Fg or IU unit).
- 8.3.2 The quantity of live microorganisms (e.g. live lactobacillus) contained in health (functional) food shall be declared in cfu/100g or 100mL.
- 8.3.3 The name and the quantity of the main and supplementary functional raw materials added shall be declared for the products of which functional components cannot be identified by the current scientific technology.
- 8.3.4 The nutrient content shall be tabulated according to Appendix A in GB13432.

#### 8.4 Health function

The health function declared shall be consistent with that approved; no description, introduction or allusion of the "therapeutic effect" of the product shall be declared.

#### 8.5 Net content and solid content

Net content and solid content shall be declared according to the Clause 5.3 in GB 7718-94.

## 8.6 Name and address of the manufacturer

- 8.6.1 The name and address of the manufacturer and packer or the retail goods packer of health (functional) food registered legally shall be declared.
- 8.6.2 Imported health (functional) food may be exempted from the Clause 8.6.1. However, the country or region (like Hong Kong, Macao, Taiwan) of origin, and the name and address of the exclusive distributor or agency in China shall be declared.

### 8.7 The date of manufacture, the date of minimum durability and / or the used - by date

- 8.7.1 The date of manufacture of health (functional) food shall apply in the sequence of the year, the month, and the day.
- 8.7.2 The date of minimum durability and / or the used by date of health (functional) food shall be declared according to the Clause 5.4.1.2 in GB 7718.

#### 8.8 Storage instruction (conditions)

In addition to the date of minimum durability and / or the used - by date, any special conditions for the storage of the health (functional) food shall be declared on the label if the validity of the date depends thereon.

GAIN Report #CH9010 Page 162 of 177

## 8.9 Instructions for consumption

8.9.1 The target consumers i.e. the specific consumer group offered to the health (functional) food shall be declared.

8.9.2 The instructions for consumption shall be declared according to the Clause 7.2 in GB 7718. The recommended dietary allowance or intake for each time to the different specific consumer groups shall be declared separately.

## 8.10 Code of the product standard and approval number

The code and order number of the national standard, trade standard or enterprise standard and the approval number of such food shall be declared.

Imported health (functional) food may be exempted from the code of the product standard.

# 8.11 Special labeling

The scientific name and content of each stimulant or hormone containing in such food shall be declared.

### ANX VI.4 ADMINISTRATION METHOD FOR HEALTH (FUNCTIONAL) FOODS

Decree from the Ministry of Health of the People's Republic of China (46th)

Issued: March 15, 1996 Enforced: June 1,1996

# **Chapter I.** General Provisions

- **Article 1.** In order to tighten the control and administration, and to guarantee the quality of health (functional) foods, this Method is enacted in accordance with the relevant provisions in "Food Hygiene Law of the People's Republic of China" (hereinafter "the Food Hygiene Law").
- **Article 2.** Health (functional) foods, as defined in this Method, refers to food products proved to have specific health-care effects, namely, can regulate certain body functions, but would not be used for the purpose of treating diseases, and are thus suitable for a specific population to consume.
- **Article 3.** The State Council Administrative Department of Health (hereinafter "the Health Ministry") will administer the procedures for examination and approval of health (functional) foods and manuals of health (functional) foods.

### Chapter II. Examination and Approval of Health (Functional) Foods

**Article 4.** Health (functional) foods must meet the following requirements:

- 1) Its positive and consistent health-care effects must be proven by necessary animal and/or human functional experiments;
- 2) All products and raw materials used must conform to the food hygiene requirements and do not cause any acute, subacute, or chronic harm to the human body;

GAIN Report #CH9010 Page 163 of 177

3) Its composition and formulation dose must be developed on the basis of scientific evidence using positive active ingredients. If the active ingredients cannot be identified under the technical conditions available, the names of all major raw materials concerning the health-care effect should be provided; and

- 4) Its labels, manuals and advertisements of health (functional) foods, must not publicize any therapeutical effect.
- Article 5. All foods claiming health-care effects must undergo examination by the Health Ministry. Researchers and manufacturers should submit an application to their local and provincial health administration authorities. Upon passing the preliminary examination, the application will be submitted to the Health Ministry for examination and approval. The Health Ministry will issue to those qualified in the examination an "Approval Certificate of Health (Functional) Foods". The approval letter is numbered as follows: "Health Ministry/ Foodstuff/ Health-Care No. [ ]" The food product that is granted an "Approval Certificate of Health (Functional) Foods" is then permitted to use the symbol of health (functional) foods designed by the Health Ministry.

**Article 6.** The following materials must be submitted when applying for "Approval Certificate of Health (Functional) Foods":

- 1) Application form of health (functional) foods;
- 2) The formula, manufacturing technology, and quality standard of the applying health (functional) foods;
- 3) The evaluation report of toxicology safety;
- 4) The evaluation report of the health-care effects;
- A list of active ingredients of the health (functional) foods and the reports of their qualitative and/or quantitative test methods, as well as the functional consistency experiments; if the active ingredients cannot be identified under the technical conditions available, a list of all major raw materials related to the health-care effects must be submitted:
- 6) A sample, and a report of hygiene test of the product;
- 7) The product label and manual (a copy for examination);
- 8) Other reference materials available domestically and abroad; and
- 9) Other materials which should be submitted according to the regulations concerned, or in support of the properties of the product.
- **Article 7.** The Health Ministry and the provincial health administrative authorities should each form an evaluation committee to undertake technological evaluation. The commission should be composed of experts in food hygiene, nutriology, toxicology, medicine and other related specialties.
- **Article 8.** The evaluation committee of the Health Ministry will hold 4 (four) evaluation meetings annually, normally in the last month of every quarter. All materials that have passed the preliminary examination must be mailed to the Health Ministry before the end of the first month of the respective quarter. The Health Ministry, based on the opinion of the evaluation committee, will decide whether the approval should be given or not within 30 working days after the evaluation.

If the evaluation committee of the Health Ministry considers that the applying health-care needs to be reexamined, reexamination should be conducted by the examination organs designated by the Health Ministry. The cost of the reexamination will be borne by the applicant of the health (functional) foods.

**Article 9.** When the application of the same health (functional) foods is made jointly by 2 or more partners, the

GAIN Report #CH9010 Page 164 of 177

"Approval Certificate of Health (Functional) Foods" will be jointly signed but the certificate will only be issued to one holder of responsibility who is determined by all the partners. When applying, in addition to all the materials listed in Article 6, a letter of recommendation for the sole holder of responsibility, signed by all users of the certificate, should be submitted.

- Article 10. The holder of an "Approval Certificate of Health (Functional) Foods" could engage in technology transfer or cooperative manufacturing with other parties on the basis of the certificate. Upon such technology transfer, the holder and the transferee should jointly apply to the Health Ministry to have a duplicate of the "Approval Certificate of Health (Functional) Foods" issued. To receive a duplicate, an existing "Approval Certificate of Health (Functional) Foods" should be held, and a valid technology transfer contract should be presented. The duplicate of "Approval Certificate of Health (Functional) Foods" is issued to the transferee who in-turn has no right to make further re-transfer.
- **Article 11.** Medicines approved for manufacture and trade by the relevant state authorities cannot apply for an "Approval Certificate of Health (Functional) Foods".
- **Article 12.** To import health (functional) foods, the importer or agent must submit an application to the Health Ministry. In addition to all the materials listed in Article 6, all related standards of the manufacturing countries (regions) or international organizations, and the permitting certification given by the relevant health authorities in the countries (regions) where the products are being produced and marketed should be submitted.
- **Article 13.** To imported health (functional) foods that pass the examinations, the Health Ministry will issue an "Approval Certificate of Imported Health (Functional) Foods". Products that have received an "Approval Certificate of Imported Health (Functional) Foods" must have the approval letter number and the health (functional) foods symbol designed by the Health Ministry marked on their package.

The customs import food hygiene control and inspection organs will inspect the presented "Approval Certificate of Imported Health (Functional) Foods", and upon verifying that the product is qualified, permission is given for import entry.

### Chapter III. Production and Sale of Health (Functional) Foods

**Article 14.** Before the production of health (functional) foods; the food manufacturing enterprise must submit an application to its local provincial health administrative authority. After the provincial health administrative authority conducts examination, issues approval and appends the permission of "xxx Health (Functional) Foods" on the hygiene licence of the applicant, production can commence.

**Article 15.** The following materials must be submitted when applying for health (functional) foods production:

- 1) A valid hygiene license for food production issued by the health administrative authority with direct jurisdiction;
- 2) The original or a duplicate of the "Approval Certificate of Health (Functional) Foods";
- The standards of health (functional) foods established by the production enterprise and the explanation of laying down the hygiene norm of the production enterprise;
- 4) In the case of technology transfer or cooperative manufacturing, a valid contract for technology transfer or cooperative manufacture signed by the holder of the "Approval Certificate of Health (Functional) Foods" should be submitted;

GAIN Report #CH9010 Page 165 of 177

5) Information on the production conditions, production technical personnel, and the quality-guarantee system; and

- 6) A report on the quality and hygiene inspection of 3 (three) batches of product.
- **Article 16.** Food products which are not examined and approved by the Health Ministry can not be manufactured under the name of health (functional) foods; and the enterprises that are not examined and approved by provincial health administrative authorities are not allowed to manufacture health (functional) foods.
- **Article 17.** The manufacturers of health (functional) foods must organize the production pursuant to the contents of the approval and can not change the product formulation, the production technology, the product quality standard established by the enterprise, and the name, label and manual of the product.
- **Article 18.** The procedure and conditions of the health (functional) foods production must conform to the hygiene norm and other hygiene requirements for food production enterprises. The selected technology should guarantee the stable and consistent properties of the active ingredients in the product, and during processing the active ingredients should not be lost, damaged or transformed, and no harmful by-product should be produced.
- **Article 19.** The batch-produced package should be used. The packing materials or containers which will be directly in contact with the health (functional) foods must conform to the relevant hygiene standards or requirements. The packing materials or containers and the packing method should ensure the preservation of the stable and consistent properties of the active ingredients in the health (functional) foods.
- **Article 20.** When the dealers or retailers purchase the health (functional) foods, they must ask for a copy of the "Approval Certificate of Health (Functional) Foods" issued by the Health Ministry and the certificate of inspection of the product. To purchase imported health (functional) foods, they must ask for a copy of the "Approval Certificate of Imported Health (Functional) Foods" and the certificate of inspection from the customs import food hygiene control and inspection organs.

# Chapter IV. Labels, Manuals and Promotion & Advertisement of Health (Functional) Foods

- **Article 21.** The labels and manuals of health (functional) foods must conform to the relevant state standards and requirements, with the following contents clearly indicated:
- 1) Health-care effect and the target population;
- 2) Consumption directions and the appropriate dosage;
- 3) Method of storage;
- 4) Names and contents of the active ingredients; if the active ingredients cannot be identified under the technical conditions available, a list of all major raw materials related to the health-care effects must be indicated;
- 5) The approval number of the health (functional) foods;
- 6) The symbol of health (functional) foods; and
- 7) Other labeling contents provided by the relevant standards and requirements.
- **Article 22.** Health (functional) foods should be named in an accurate but scientific way; names of persons, places, or code names, as well as exaggerated or misleading names can not be used; names of the non-principal active ingredients in the product cannot be used either.

GAIN Report #CH9010 Page 166 of 177

**Article 23.** The contents of labels, manuals and advertisements of health (functional) foods must be true and in accordance with the quality requirements of the product, and disease-curing properties can not be implied or publicized.

- **Article 24.** Feudalist superstitious beliefs are strictly prohibited from the publicity of health (functional) foods.
- **Article 25.** Food products which are not examined and approved by the Health Ministry can not be publicized under the name of health (functional) foods.

# Chapter V. Control and Administration of Health (Functional) Foods

- **Article 26.** In accordance with the Food Hygiene Law and the regulations and standards of the Health Ministry, health administrative authorities at various levels should intensify control, monitoring and administration of health (functional) foods. The Health Ministry could arrange supervised site-checks of health (functional) foods which has been approved for production, and the result of site-checks will be released to the public.
- **Article 27.** Under the following circumstances, the Health Ministry could decide to reexamine the approved heathcare food:
- 1) As a result of scientific advance, understanding of the effects of the previously-approved health (functional) foods is changed;
- 2) The formulation, production technology, and the health-care effects are suspected to have possibly undergone changes; and
- 3) Necessity for control and monitoring work of health (functional) foods.

For products that fail the reexamination or refuse reexamination, the "Approval Certificate of Health (Functional) Foods" will be revoked by the Health Ministry; while for products that pass the reexamination, their previously-issued certificate will remain valid.

**Article 28.** The general hygiene control and administration for health (functional) foods manufacturers are conducted in accordance with the Food Hygiene Law and other relevant regulations.

### Chapter VI. Provisions of Penalty

- **Article 29.** In any of the following cases, health administrative authorities of local governments above county level will impose penalties pursuant to Article 45 of the Food Hygiene Law:
- 1) Production and sale of products under the name of health (functional) foods without previous examination and approval issued by the Health Ministry as specified in this Method;
- 2) Sale of products under the name of health (functional) foods without the permits for imported health (functional) foods; and
- 3) Name, label and manual not used in accordance with the approved contents.
- **Article 30.** If healing effects are publicized in the advertisement of health (functional) foods, or feudalist superstitious beliefs are used in the publicity of health (functional) foods, a penalty will be imposed pursuant to the relevant regulations in the "Food Ethics Administration Method", issued by the State Administration for Industry and

GAIN Report #CH9010 Page 167 of 177

Commerce, and the Health Ministry.

**Article 31.** Penalty will be imposed following relevant regulations, in case of violation of the Food Hygiene Law and other applicable hygiene requirements.

# Chapter VII. Appended Provisions

- **Article 32.** The standard and the effect-evaluation method of health (functional) foods are drafted, approved and issued by the Health Ministry.
- **Article 33.** The evaluation and test of effects, and the toxicological evaluation of safety of health (functional) foods are conducted by the examination organs designated by the Health Ministry.
- **Article 34.** This Method is interpreted by the Health Ministry.
- **Article 35.** This Method is enforced from June, 1, 1996, and supercedes any other hygiene administration methods.

GAIN Report #CH9010 Page 168 of 177

### VII. COPYRIGHT/TRADEMARK LAWS

#### A. SUMMARY AND COMMENTS

**Patents:** Under China's patent law enacted in 1994, domestic and foreign patent applications have increased steadily. Patent protection was extended in January 1993 to pharmaceutical and chemical products, as well as processes; the period of protection was lengthened to 20 years. The amendments also provide the patent-holder the right of importation and expand the scope of patent infringement to include unauthorized sale or importation of products manufactured with the use of patented processes. Under the provisions of the MOU, China extends transitional administrative protection to some U.S. pharmaceutical and agrochemical products for up to seven-and-a-half years.

China acceded to the patent cooperation treaty on January 1, 1994, and will perform international patent searches and preliminary examinations of patent applications. Under the patent law, foreign parties must utilize the services of a registered Chinese agent to submit the patent application. Preparation of the application may be done by foreign attorneys or the Chinese agent.

**Copyrights:** In March 1992, China established bilateral copyright relations with the U.S. and in October 1992 acceded to both the Berne Convention and the Universal Copyright Convention. China also joined the Geneva Phonogram Convention in April 1993. Following accession to the Berne Convention, China explicitly recognized computer software as a literary work and extended protection to computer programs for 50 years without mandatory registration requirements.

**Trademarks:** Although problems remain with enforcement, China's trademark regime basically conforms to world standards. In October 1989, China joined the Madrid Pact for protection of trademarks; the latter grants reciprocal trademark registration to member countries. China amended its trademark regime in February 1993 to add special regulations for criminal prosecution for trademark infringement.

China has a "first-to-register" system that requires no evidence of prior use or ownership, leaving registration of popular foreign trademarks open to anyone. The Unfair Competition Law extends IPR protection to trade redress. Under the trademark law, foreign parties must utilize the services of registered Chinese agent to submit the trademark application. Preparation of the application may be done by foreign attorneys or the Chinese agent.

# **B.** PENDING UPDATES

The following article was published in the official English-language newspaper China Daily, May 23-29,1999 Vol.19 No. 5895 (BW No. 323):

"Law on trademarks updated: Legislative revision aims to improve protection of intellectual property rights

China is drastically revising its Trademark Law to meet the needs of an economy in transition from central planning to rule by the market. The draft of the law has been finished and sent to concerned parties to solicit their opinions, said Lu Heben, an official with the Trademark Bureau of the State Administration of Industry and Commerce(SAIC). It will subsequently be submitted to SAIC for approval before it goes to the State Council and finally the National People's Congress for revision and approval.

GAIN Report #CH9010 Page 169 of 177

The Trademark Law currently in use went into effect in 1983 and was revised in 1993. According to the present draft, four provisions of the present law will be canceled, 15 changed and 40 more added.

Registering for malicious purposes trademarks which are being used by others and have not been registered will be forbidden in the revised law. The provision is aimed at protecting the rights of trademark users by preventing the registration of others' trademarks for the purpose of selling them at exorbitant prices back to the users. The revision also intends to improve protection of intellectual property rights with more severe punitive measures.

It gives an explicit definition of trademark infringement. In case of infringement, damages should also cover a proper proportion of court costs and lawyer's fees. Fines for trademark infringement or counterfeit commodities will be 500 to 1,000 times the worth of a single counterfeit commodity. The present provisions stipulate that the fine should be one-half to five times the illegal income from trademark infringement or sales of counterfeit commodities. However, it has proved almost impossible to ascertain the actual illegal income for compensation purposes.

Moreover, as there is no specific stipulation concerning damages, in some cases they have hardly covered the lawyer's fees, which has dented enthusiasm for taking action to protect trademark rights. This is especially so in some foreign-related cases, insiders say. All this will be addressed in the revised law, into which special protection provisions for famous trademarks will also be written.

Taking account of economic globalization, there will also be clear stipulations granting the same rights to internationally registered trademarks which have applied territorial extension as to domestically registered ones. Procedures for applying for international registration by a domestic holder of a registered trademark will also be made clear in the revised law.

The revision will also allow anyone to apply for registration of a trademark and permit the co-ownership of a trademark. The important constructive elements of a trademark will be expanded. The revision is also expected to simplify trademark registration procedures, shorten the legal time limit and strengthen judicial supervision."

**Note:** For the complete English text of China's Copyright Law, Patent Law and Trademark Law, please refer to the Chinalaw Web site: http://www.qis.net/chinalaw/

GAIN Report #CH9010 Page 170 of 177

### VIII. IMPORT PROCEDURE

In China a network of good relationships, or *guanxi*, is important to ensure a business encounters as few difficulties as possible. This philosophy applies to every aspect of the business world, including clearing a product through customs. Many foreign companies find it worthwhile to hire one person to deal with customs officers full-time. For firms in which business volume does not justify hiring a dedicated person, using the same personnel all the time for customs matters is a good idea. This way, the person has a chance to get to know the customs officers and to develop a good relationship with them. In general, importers report a gradual improvement in customs clearance times.

Prior to customs clearance, imported products go through the following:

- 1) Verification of the consignee's import licence.
- 2) Verification of the documents of goods entitled to tax exemption.
- 3) Verification of the packing list, commercial invoices, and shipping documents.
- 4) China Commodity Inspection Bureau (CCIB) checks products for quality, quantity and weight.
- 5) Health Quarantine Bureau (HQB) will test for pesticides, antibiotics or any other visible and non-visible problems. (The Bureau also administers and approves products labeling for processed food products.)
- For animal and plant products (for both imported animal and plant must meet with the law of the People's Republic of China on the entry and exit animal and plant quarantine, see section V. Quarantine inspection is required. This was formerly done by the Ministry of Agriculture's Animal & Plant Quarantine Bureau (CAPQ), but this unit is now part of China Customs.

Note: At present, the above mentioned three Chinese authorities (4,5,6) have been merged into one new organization called the State Administration of Entry & Exit for Inspection & Quarantine of the People's Republic of China (SAIQ) which is now under China Customs. This merger, completed at the national level in Beijing, is just now starting to take place at the provincial and local government levels.

General Operating Procedures for Importing Food Products are the following:

- 1) Possessing sufficient quota and amount of foreign currency;
- 2) Applying to the local I/E Commodity Inspection Bureau and Sanitary Quarantine Bureau for approval and record regarding the quality, time, and source countries of food imports (takes 2-3 days);
- 3) Applying to the local Planning Commission and Foreign Trade Department for import license covering the quantity and price of food products to be imported (takes 2 weeks -3 months; on average 1 month);
- 4) Making direct purchases from abroad if authorized or use an authorized company as import agent, in which case the import license and needed quota and amount of foreign currency shall be transferred to the latter

GAIN Report #CH9010 Page 171 of 177

(needs commission in accordance with type of goods);

Upon arrival of imported goods, applying to the Commodity Inspection Bureau (CCIB) and Animal & Plant Quarantine Bureau (CAPQ) for inspection while submitting certificates issued by commodity inspection and animal and plant quarantine authorities of exporting countries (takes 1-2 days for fresh food; 1 week or longer for canned food and needs inspection fees from 0.1% to 0.5% based on kinds of goods);

- 6) Upon completion of inspection, making Customs declaration (takes 1-2 days and needs 0.5%-1% cargo value);
- 7) Paying import duties and clearing goods.

Imported packaged foods will first face a checkpoint at the border. The Chinese Import/Export Commodity Inspection Bureau and the local Health Quarantine Bureaus at the border are responsible for examining packaged food labels for compliance with the "General Standard for the Labeling of Food."

Firms desiring official re-approval of their labels can apply to the same agencies responsible for approving of temporary labels (the Health Quarantine Bureau of the People's Republic of China, and the Secretariat of the National Foodstuff Industry Standardization Technology Commission) which were accepted before the September 1, 1996 deadline. The Agricultural Trade Office in Shanghai recommends a less formal course of action, however. Formal re-approval is not required, and the Chinese bureaucracy is not well-equipped to manage the inter-agency communication necessary to make pre-approval effective. Pre-approval itself is likely to be lengthy and uncertain, and probably will not expedite the inspection process when packaged foods arrive at the border.

The local bureaus of technical supervision and the local health quarantine bureaus are primarily responsible for enforcing food labeling standards in the marketplace. The local bureaus of technical supervision often entrust separate state-owned inspection enterprises to monitor retail markets at irregular intervals. Inspectors usually visit stores 3-4 times per year, examining selected product categories for compliance with any number of standards – including the packaged food labeling law. Examinations and their particular emphasis are often driven by consumer complaints. Although food enterprises also may make complaints against their competitors to solicit market examinations, this rarely occurs in practice.

China is lowering tariffs in an attempt to qualify for the membership of the WTO. The average import tariff level was reduced in September 1997 to 23 percent (down from 43 percent in 1992), and the government is publicly committed to lowering average tariffs on about 6,300 items. At present, tariffs on materials and industrial supplies are lowest (less than 20 percent in most cases) relative to consumer and agri-foods, which are generally subject to rates of 30-60 percent. However, as will be discussed below, few companies actually pay the full official rates on their imports.

Since 1984, foreign businesses have been able to import through specialized state-owned Foreign Trade Corporations (FACs). The FACs (also known as import/export companies) then deal with the wholesalers. Without direct contact with the wholesalers, foreign companies often have trouble controlling the distribution of their products. With this channel it is also difficult to understand why your product is or is not selling. However, as the traditional way of importing goods to China, this method has the benefit of relatively easy customs clearance and expedient government approvals.

GAIN Report #CH9010 Page 172 of 177

According to the current import administrative system in China, import goods fall into three major categories. Class I includes products such as cars, steel, and grain which are controlled by the central government. The quantity and value of their imports must be approved on a case-by-case basis by the State Planning Commission and the Ministry of Foreign Trade & Economic Cooperation (MOFTEC). Class II are products that need licenses issued by the Special Representative Office of MOFTEC stationed at major port cities. Class III are products that are subject to approval by local planning authorities and foreign trade departments for a case-by-case basis. Foodstuff falls into the third category. MOFTEC also issues import licenses to manufactures in China with export values exceeding US\$ 1 million annually. Foreign-trade licences are available to firms with annual exports of over US\$ 10 million. MOFTEC may also grant foreign-trade licence to wholesalers, retailers and chains stores with annual business volumes of RMB 1 billion or more. Occasionally, a research institute or high-tech company can win import-export company status if their trade volume is more than US\$ 300,000 for at least two years consecutively.

The most common method that foreign companies use to import goods into China is through a third party import-export company based in Hong Kong. The import-export company oversees and manages the customs clearances and arranges the distribution of products through their affiliate in China.

Import-export companies save foreign firms customs hassles, logistical difficulties and distribution challenges. Unfortunately, many of these companies use grey channels to import the foreign goods that circumvent Chinese tariff and VAT requirements. These channels include:

# Smuggling;

Making use of special tax reduction quotas intended for other purposes;

Fake joint ventures with hotels;

Under reporting invoice prices to reduce duty;

Obtaining false documentation reporting full duty and /or VAT paid.

For companies serious about long-term business in the Chinese market, this strategy has a number of negative implications. Even if foreign suppliers sell their products to a trading company in Hong Kong, the supplier may be held responsible if improper means are used to import and distribute their products in China. Foreign suppliers can be found guilty of acting in concert with the distributor and may be severely fined by the Chinese Customs Authorities.

Another disadvantage of using a third party importer is the lack of control over products. Some products never get to the China market. Foreign companies are misled into selling their products cheap and the products end up "transhipped" and resold for many times the original price in North America or elsewhere. Products that do end up sold in the China market are sold at prices that are set at the discretion of the distributor and retailer. Foreign companies do not have any control over this process.

GAIN Report #CH9010 Page 173 of 177

### APPENDIX A - GOVERNMENT REGULATORY AGENCIES CONTACTS

# **Beijing Contacts:**

### Beijing Bureau of Technical Supervision, First Division of Standardization

4 Zhi Chun Road Add:

Hai Dian District

Beijing 100088, P.R. China

Mr. Li Ruchen Contact:

Phone: (86-10) 6202-2288 ext. 3911

Fax: (86-10) 6203-1010

# China's State Administration of Entry & Exit Inspection and Quarantine

Department for Supervision on Animals and Plants

Add: A10 Chaowai Dajie

Beijing 100020, P.R. China

Mr. Lu Houlin (Plants) Contact: Phone: (86-10) 6599-3981 Fax: (86-10) 6599-3947 Mr. Bi Kexin (Animals) Contact: (86-10) 6599-4194 Phone:

Fax: (86-10) 6599-3870

Department for Supervision on Certification

Contact: Mr. Shi Xiaowei Phone: (86-10) 6599-4624 Fax: (86-10) 6599-4570

# **State Administration of Light Industry**

Administration Center of Food Industry

Add: B Fuchengmenwai Dajie

Beijing 100833, P. R. China

Mr. Jia Zhiren Contact:

Phone: (86-10) 6839 6506 (86-10) 6839 6800 Fax:

# **China Food Industry Association**

No. 5 Guan'anmenwai Taipinggiao Dongli Add:

Beijing 100073, P. R. China

Ms. Qi Guimei Contact: Phone: (86-10) 6344 8975 Fax: (86-10) 6340 2364 GAIN Report #CH9010 Page 174 of 177

# **China Green Food Development Center**

Contact: Mr. Wang Hua Fei

Phone: (86-10) 6422-8888 ext. 7202

Fax: (86-10) 6422-1175

# **Ministry of Public Health**

Department of Hygiene Regulation and Supervision

Add: 44 Houhai Beiheyan

Beijing 100725, P. R. China

Contact: Ms. Zhang Lingping

Phone: (86-10) 6400 1675, 6401 3352

Fax: (86-10) 6401 4341

# **Ministry of Agriculture**

Department of International Cooperation

Add: 11 Nongzhangguan Nanli

Beijing 100026, P. R. China

Contact: Ms. Gao Jinghong

Phone: (86-10) 6419 2452, 6419 4363 Fax: (86-10) 6419 2466, 6419 2451

E-mail: moada01@agri.gov.cn

## **Shanghai Contacts:**

### \*Shanghai Import & Export Commodity Inspection Bureau of the P.R.C.

Add: 13 Zhongshan Road (E.1)

Shanghai 200002, P.R. China

Phone: (86-21) 6321-5135 ext. 102

Fax: (86-21) 6325-5134

### \*Shanghai Animal & Plant Quarantine Bureau

Add: 361 Zhao Jia Bang Rd.

Shanghai, 200032, P.R. China

Contact: Mr. Xu Chao Zhe, Director

Phone: (86-21) 6471-6171 Fax: (86-21) 6473-2999

#### **Shanghai Customs**

Add: 13 Zhongshan Road (E.1)

Shanghai, 200002 P.R. China

Phone: (86-21) 6323-2410 Fax: (86-21) 6323-2102 Web: www.customs.gov.cn GAIN Report #CH9010 Page 175 of 177

GAIN Report #CH9010 Page 176 of 177

# Shanghai Bureau of Technical Supervision, Division of Standardization

Add: 1227 Chang Le Road

Shanghai, 200031, P.R., China

Contact: Yang Zhende

Phone: (86-21) 6431-5500 ext. 2231

Fax: (86-21) 6445-0779

# **Guangzhou Contacts:**

### **Guangzhou Customs Administration**

Add: 2 Fifth Road

Shamian 510130, Guangdong

Contact: Yang Junsheng Phone: (86-20) 8888-2738

**Note:** The agencies marked with an asterisk (\*) are in the process of reorganization. Their new contact information will be released to the public after the completion of the merge around October, 1999.

GAIN Report #CH9010 Page 177 of 177

# APPENDIX B - OTHER IMPORT SPECIALIST CONTACTS

### **Useful Internet web sites:**

www.qis.net/chinalaw Translations of laws and regulations from mainland China, made by the University of Maryland

School of Law.

www.atoshanghai.org U.S. Agricultural Trade Office, Shanghai homepage

www.fas.usda.gov Foreign Agricultural Service of the U.S. Department of Agriculture