## SCIENTIFIC SUB-COMMITTEE

40.808 E

12th Session

O. Fr.

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Brussels, 4 December 1996.

# POSSIBLE INCLUSION OF CHEMICAL STRUCTURES IN THE EXPLANATORY NOTES TO CHAPTER 29 (Item II.14. on Agenda)

#### Reference documents:

39.480, Annex A/5 (Report - SSC/9) 39.563 (HSC/16) 39.600, Annex D/2 (Report - HSC/16) 39.908 (SSC/10) 40.080, Annex A/8 (Report - SSC/10) 40.037, paragraph 23 (HSC/17) 40.260, Annex D, paragraph 24 (Report - HSC/17) 40.760 (SSC/12)

# I. BACKGROUND

I. After the preparation of Doc. 40.760, the Secretariat received the following comments from the European Community, the Japanese Administration and the Canadian Administration.

## II. COMMENTS BY THE EUROPEAN COMMUNITY

III. AThe EC intends to submit a proposal on this matter for discussion in the Scientific Sub-Committee. Unfortunately, since the EC document containing that proposal has not yet been examined by the Customs Code Committee, the EC will probably not be able to send that proposal in time for the Scientific Sub-Committee's 12th Session@

# III. COMMENTS BY THE JAPANESE AD MINISTRATION

- V. "In response to your fax requesting comments on the possible inclusion of chemical structures in the Explanatory Notes to Chapter 29, it would seem that the insertion of the chemical structures in the Explanatory Notes would be very useful.
- VII. With reference to which chemical structures should be included in the Explanatory Notes, the Japanese Administration would like to support the Secretariat comments in paragraphs 10 to 13 of Doc. 39.563.
- IX. Since the Japanese Customs Administration has already prepared almost all the chemical structures for chemicals which are specified in the Explanatory Notes to Chapter 29 in a separate Annex to a publication in Japanese, entitled "International and Domestic Classification Opinions" (provisional name), chemists in the laboratory have preliminary identified about 490 chemical names cited in the Explanatory Notes, for which structures might be added, by placing circles on the left side of the chemical names in a copy of the Annex. A copy will be sent, by separate post."

## IV. COMMENTS BY THE CANADIAN ADMINISTRATION

- XI. "There are approximately 1,100 to 1,200 chemicals named in the Explanatory Notes to Chapter 29, not including some 350-400 in the narcotics, precursors and steroids listed towards the end of the Chapter. (Some 1,500 total named products.) In the Canadian Administration's opinion, inclusion of all of these products in the Explanatory Notes is not warranted. Canada would, however, propose including most of the chemicals named in the legal texts when the information currently in the Explanatory Notes is not sufficient to understand the structure of the material.
- XIII. The following proposed list contains some 144 chemicals representative of most of the major classes named in the structured nomenclature. Occasionally, other chemicals are included when it would be beneficial (i.e gonane, penicillanic acid). When spread over the 100+ pages of Chapter 29, they would average only 1-2 new structures per page. Also included are 35 products described in the General Explanatory Note to Sub-Chapter X which list the major heterocyclic ring systems and which are important for classification in Sub-Chapter X."

# V. <u>SECRETARIAT COMMENTS</u>

- XV. It is clear from the comments received that, at first sight, the EC, Japan and Canada are in favour of publishing the chemical structures of certain products of Chapter 29.
- XVII. The list put forward by the Canadian Administration (appended hereto) consists essentially of the products mentioned in the legal texts, plus the major heterocyclic ring systems listed in the General Explanatory Note to Sub-Chapter X of Chapter 29. Although this approach limits the number of inclusions to approximately 180 products, the Secretariat feels that the insertion of each structure within the relevant Explanatory Note would entail a considerable reworking of the Explanatory Notes to Chapter 29.
- XIX. The Secretariat also draws the Scientific Sub-Committee's attention to the fact that, while agreeing with the Secretariat's comments in Doc. 39.563, the Japanese Administration puts forward an alternative approach, namely publishing a separate Annex which would make it possible appreciably to increase the number of chemicals identified by their chemical structures. In view of its size, the Japanese Administration's publication has not been reproduced in this document. A copy will be available in the meeting room.

## VI. CONCLUSION

XXI. The Sub-Committee is invited to take account of the above comments by the European Community and by the Japanese and Canadian Administrations, when examining this Agenda item.

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X X

# List of chemical structures for Inclusion in the Explanatory Notes to Chapter 29.of the HS (Proposal by Canada)

Heading 29.08

Heading 29.01 None

None Heading 29.09

Heading 29.02 None

Heading 29.10 o-xylene

m-xylene

p-xylene Oxirane styrene Methyloxirane cumene **Epichlorohydrin** 

Heading 29.11 Heading 29.03

DDT Hemiacetal example

Methylal

Heading 29.04 Heading 29.12

None Benzaldehyde

Vanillin Ethyl vanillin

Camphor

None

Heading 29.05 Heading 29.13

Allyl alcohol None

Pentaerythritol

Heading 29.14 Mannitol

**D**-glucitol

Ionone(s) Methylionone(s)

Menthol Anthraquinone

Terpineol(s)

Heading 29.06

Heading 29.15

Heading 29.07

Cresol(s) Xylenol(s) Naphthol(s) Resorcinol

Hydroquinone(quinol)

Heading 29.16 Bisphenol A

> Acrylic acid Methacrylic acid

Benzoic acid, Benzoyl peroxide, Benzoyl

chloride

## Heading 29.17

Azelaic acid Sebacic acid Maleic anhydride Phthalic acid(s) Phthalic anhydride Terephthalic acid

# Heading 29.18

Citric acid
Gluconic acid
Phenylglycolic acid
Salicylic acid
O-Acetylsalicylic acid

## Heading 29.19

Glycerophosphoric acid Tributyl phosphate

## Heading 29.20

Sodium O,O-dibutylthiophosphate Sodium O,O-ditolyldithiophosphate Methyl nitrite Ethyl nitrate Nitroglycerol Diguaiacyl carbonate Tetraethyl silicate

## Heading 29.21

Hexamethylenediamine
Aniline
Toluidine(s)
1-Naphtylamine
Phenylenediamine(s)
Example of a nitrosoamine
(N-nitrosodimethylamine?)

## Heading 29.22

Mono, di, triethanolamine
Meclophenoxate
Aminohydroxynaphthalenesulphonic
acid(s)
Anisidine(s)
Dianisidine(s)
Phenetidine(s)
Lysine
Glutamic acid

## Heading 29.23

Choline Lecithin

## Heading 29.24

Diethyldiphenylurea 2-Acetamidobenzoic acid

## Heading 29.25

Saccharin Diphenylguanidine

## Heading 29.26

Acrylonitrile
1-Cyanoguanidine

#### Heading 29.27

Benzenediazonium chloride Azobenzene Azoxybenzene

## Heading 29.28

Phenylhydrazine Phenylglyoxime Heading 29.29

Toluene diisocyanate

## **Sub-chapter X General**

**Furan** Thiophen Pyrrole Oxazole Isooxazole Thiazole Imidazole Pvrazole Furazan Triazole Tetrazole Pyran Thiin Pyridine Oxazine Thiazine Pyridazine Pyrimidine Pryazine Piperazine Coumarone

Quinoline and isoquinoline

Acridine

Indole

Benzopyran Xanthene

Benzothiophene (Thionaphthene)

Indazole Benzimidazole Phenazine Phenoxazine Benzoxazole Carbazole Quinazoline Benzothiazole

## Heading 29.30

Sodium ethyldithiocarbonate Isopropy ethyl thiocarbamate Sodium diethyldithiocarbamate Tetraethyl thiuramdisulphide Methionine

#### Thiourea

# Heading 29.31

Hexamethyldisiloxane Iron carbonyl

# Heading 29.32

Tetrahydrofuran 2-Furaldehyde Furfuryl alcohol Coumarin Isosafrole

1-(1,3-Benzodioxol-5-yl)propan-2one

Piperonal Safrole

Anhydromethylenecitric acid

Example for esters forming part of two rings

Example for dilactone

#### Heading 29.33

Phenazone Hydantoin **Pyridine Piperidine** Malonvlurea Melamine 6-Hexanelactam

Example of amide forming part of two rings

# Heading 29.34

Phenothiazine

Phenolsulphonethalein

#### Heading 29.35

o-Toluenesulphonamide Sulphapyridine Sulphathiolurea

#### Heading 29.36

Vitamin A (retinol)
Vitamin B1 (thiamin)
Vitamin B2 (riboflavin)
Pantothenic acid
Pyridoxine
Folic acid
Ascorbic acid
Calciferol
alpha-Tocoferol

# Heading 29.37

Gonane Cortisone

# Heading 29.38

Rutoside

# Heading 29.39

Morphine Quinine Caffeine Ephedrine Theophylline Nicotine

# Heading 29.40

Galactose Hydroxypropyl sucrose Tribenoside Sucrose monoacetate

# Heading 29.41

Penicillin G
Penicillanic acid (not an antibiotic)
Streptomycin A
Tertracycline
Chloramphenicol
Erythromycin A

# Heading 29.42

None

# Heading 29.01

None

# Heading 29.02

o-xylene m-xylene p-xylene styrene cumene

# Heading 29.03

DDT

# Heading 29.04

None

# Heading 29.05

Allyl alcohol Pentaerythritol Mannitol D-glucitol

# Heading 29.06

Menthol Terpineol(s)

# Heading 29.07

Cresol(s) Xylenol(s) Naphthol(s) Resorcinol Hydroquinone(quinol) Bisphenol A