

110.1 Foods and Beverages (liquid and powder forms)

These SRMs are for validation of analytical procedures and calibration of apparatus used in the analysis of trace elements and other analytes in foods and related products.

Technical Contact: rolf.zeisler@nist.gov

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	1549	1566b	1567a	1568a	1570a	1577b	2384	2385	3276
Description	Non-fat Milk Powder	Oyster Tissue	Wheat Flour	Rice Flour	Spinach Leaves	Bovine Liver	Baking Chocolate	Slurried Spinach	Carrot Extract Oil
Unit Size	100 g	25 g	80 g	80 g	60g	50 g	5 x 91 g	4 x 70 g	5 x 1 ml
Element (Concentrations are in mg/kg, unless noted by a single asterisk for mass fraction, in %)									
Aluminum	(2)	197.2	5.7	4.4	310	(3)			
Antimony	(0.00027)	(0.011)		(0.0005)		(0.003)			
Arsenic	(0.0019)	7.65	(0.006)	0.29	0.068	(0.05)			
Barium		(8.6)							
Bromine	(12)		(6)	(8)		(9.7)			
Boron		(4.5)			37.6				
Cadmium	0.0005	2.48	0.026	0.022	2.89	0.50			
Calcium	1.30*	0.0838*	0.0191*	0.011*		116	840	624	
Chlorine	1.09*	0.514*	(565)	(300)		0.278*			
Chromium	0.0026	—							
Cobalt	(0.0041)	0.371	(0.006)	(0.018)		(0.25)			
Copper	0.7	71.6	2.1	2.4		160	23.2	0.9	
Fluorine	(0.20)	—							
Iodine	3.38	—	(0.0009)	(0.009)					
Iron	1.78	205.8	14.1	7.4		184	132	17	
Hydrogen		(7.2)							
Lead	0.019	0.038	(< 0.020)	(< 0.010)	(0.20)	0.129			
Magnesium	0.120*	0.1085*	0.040*	0.056*		601	2570	368	
Manganese	0.26	18.5	9.4	20.0	75.9	10.5	20.3	3.8	
Mercury	0.0003	0.0371	(0.0005)	0.0058	0.030	(0.003)			
Molybdenum	(0.34)		0.48	1.46		3.5			
Nickel		1.04		(0.16)	2.14				
Nitrogen		(7.6)*			(6.06)*				

(Arachidic Acid)	0.0578
(Z)-11-Eicosenoic Acid (C20:1 n-9) (Gondoic Acid)	0.353
Docosanoic Acid (C22:0) (Behenic Acid)	0.126
Tetracosanoic Acid (C24:0) (Lignoceric Acid)	0.0242