

Elevated-level Multivitamin Certified Reference Material for Minerals and Vitamins

Art. ID	NRC-VITB-1
Unit	100 g
Deliverydetails	No Dangerous Good /not restricted

Description

This CRM is not intended for human consumption, it is intended for the calibration of procedures and the development of methods for the determination of minerals and vitamins in multivitamin materials or similar matrices. A minimum sample mass of 2.57 g (one tablet) is recommended.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified value	Arsenic (As)	[7440-38-2]	0,103 ± 0,026	mg/kg		
Certified value	Boron (B)	[7440-42-8]	163 ± 8	mg/kg		
Reference value	Bromine (Br)	[7726-95-6]	0,35 ± 0,08	mg/kg		
Information value	Cadmium (Cd)	[7440-43-9]	0,04	mg/kg		
Certified value	Calcium	[7440-70-2]	57100 ± 2400	mg/kg		
Reference value	Chlorine (Cl)	[7782-50-5]	319 ± 42	mg/kg		
Certified value	Chromium (Cr)	[7440-47-3]	19,8 ± 1,2	mg/kg		
Reference value	Chromium picolinate (as Cr)		19 ± 0,8	mg/kg		
Certified value	Cobalt (Co)	[7440-48-4]	0,97 ± 0,1	mg/kg		
Certified value	Copper (Cu)	[7440-50-8]	98 ± 4	mg/kg		
Reference value	Iodine (I)	[7553-56-2]	198 ± 10	mg/kg		
Certified value	Iron (Fe)	[7439-89-6]	7030 ± 120	mg/kg		
Certified value	Lead	[7439-92-1]	0,108 ± 0,008	mg/kg		
Certified value	Magnesium (Mg)	[7439-95-4]	36700 ± 1600	mg/kg		
Certified value	Manganese (Mn)	[7439-96-5]	795 ± 32	mg/kg		
Certified value	Mercury (Hg)	[7439-97-6]	< 0,004	mg/kg		
Certified value	Molybdenum (Mo)	[7439-98-7]	18,1 ± 2	mg/kg		
Certified value	Phosphorus	[7723-14-0]	19000 ± 800	mg/kg		
Certified value	Potassium (K)	[7440-09-7]	12100 ± 1000	mg/kg		
Certified value	Selenium (Se)	[7782-49-2]	4,2 ± 1,4	mg/kg		
Reference value	Selenomethionine (as Se)		3,0 ± 1,2	mg/kg		
Information value	Sodium (Na)	[7440-23-5]	1000	mg/kg		
Information value	Strontium (Sr)	[7440-24-6]	9	mg/kg		
Certified value	Zinc (Zn)	[7440-66-6]	2360 ± 80	mg/kg		
Certified value	Arsenic (As)	[7440-38-2]	0,269 ± 0,068	µg/tablet		
Certified value	Boron (B)	[7440-42-8]	426 ± 23	µg/tablet		

Reference value	Bromine (Br)	[7726-95-6]	0,93 ± 0,21	µg/tablet
Information value	Cadmium (Cd)	[7440-43-9]	0,01	µg/tablet
Certified value	Calcium	[7440-70-2]	149400 ± 7100	µg/tablet
Reference value	Chlorine (Cl)	[7782-50-5]	835 ± 111	µg/tablet
Certified value	Chromium (Cr)	[7440-47-3]	51,7 ± 3,3	µg/tablet
Reference value	Chromium picolinate (as Cr)		49,8 ± 2,4	µg/tablet
Certified value	Cobalt (Co)	[7440-48-4]	2,54 ± 0,27	µg/tablet
Certified value	Copper (Cu)	[7440-50-8]	252 ± 11	µg/tablet
Reference value	Iodine (I)	[7553-56-2]	518 ± 29	µg/tablet
Certified value	Iron (Fe)	[7439-89-6]	18410 ± 510	µg/tablet
Certified value	Lead	[7439-92-1]	0,281 ± 0,022	µg/tablet
Certified value	Magnesium (Mg)	[7439-95-4]	96000 ± 4700	µg/tablet
Certified value	Manganese (Mn)	[7439-96-5]	2080 ± 96	µg/tablet
Certified value	Mercury (Hg)	[7439-97-6]	< 0,010	µg/tablet
Certified value	Molybdenum (Mo)	[7439-98-7]	46,5 ± 5,2	µg/tablet
Certified value	Phosphorus	[7723-14-0]	48800 ± 2300	µg/tablet
Certified value	Potassium (K)	[7440-09-7]	31000 ± 2600	µg/tablet
Certified value	Selenium (Se)	[7782-49-2]	10,8 ± 3,6	µg/tablet
Reference value	Selenomethionine (as Se)		7,8 ± 3,1	µg/tablet
Information value	Sodium (Na)	[7440-23-5]	2560	µg/tablet
Information value	Strontium (Sr)	[7440-24-6]	22	µg/tablet
Certified value	Zinc (Zn)	[7440-66-6]	6060 ± 240	µg/tablet
Information value	Ascorbic acid	[50-81-7]	22410	mg/kg
Information value	alpha Tocopherol		3580	mg/kg
Information value	beta Carotene		110	mg/kg
Reference value	Biotin	[58-85-5]	615,3 ± 1	mg/kg
Certified value	Cyanocobalamin	[68-19-9]	1,7 ± 0,6	mg/kg
Information value	Ergocalciferol	[50-14-6]	0,13	mg/kg
Reference value	Folic acid	[59-30-3]	146 ± 16	mg/kg
Information value	Lutein	[127-40-2]	1,6	mg/kg
Reference value	Niacinamide	[98-92-0]	7650 ± 420	mg/kg
Reference value	Pantothenic acid		3830 ± 200	mg/kg
Information value	Phylloquinone	[84-80-0]	11	mg/kg
Reference value	Pyridoxine HCl		890 ± 100	mg/kg
Information value	Retinol acetate		80	mg/kg
Reference value	Riboflavin	[83-88-5]	674 ± 30	mg/kg

Reference value	Thiamine HCl		642 ± 64	mg/kg
Information value	Ascorbic acid	[50-81-7]	57310	µg/tablet
Information value	alpha Tocopherol		8710	µg/tablet
Information value	beta carotene		300	µg/tablet
Reference value	Biotin	[58-85-5]	40,1 ± 2,8	µg/tablet
Certified value	Cyanocobalamin	[68-19-9]	4,4 ± 1,6	µg/tablet
Information value	Ergocalciferol	[50-14-6]	0,33	µg/tablet
Reference value	Folic acid	[59-30-3]	381 ± 43	µg/tablet
Information value	Lutein	[127-40-2]	4,1	µg/tablet
Reference value	Niacinamide	[98-92-0]	20030 ± 1190	µg/tablet
Reference value	Pantothenic acid		10030 ± 570	µg/tablet
Information value	Phylloquinone	[84-80-0]	26	µg/tablet
Reference value	Pyridoxine HCl		2320 ± 270	µg/tablet
Information value	Retinol acetate		220	µg/tablet
Reference value	Riboflavin	[83-88-5]	1760 ± 90	µg/tablet
Reference value	Thiamine HCl		750 ± 100	µg/tablet