

## Low-level Multivitamin Certified Reference Material for Minerals and Vitamins

Art. ID	NRC-VITA-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]	0,046 ± 0,008	mg/kg		
Certified value	Boron (B)	[7440-42-8]	84 ± 10	mg/kg		
Reference value	Bromine (Br)	[7726-95-6]	0,28 ± 0,08	mg/kg		
information	Cadmium (Cd)	[7440-43-9]	0,02	mg/kg		
Certified value	Calcium	[7440-70-2]	28 600 ± 4400	mg/kg		
Reference value	Chlorine (Cl)	[7782-50-5]	222 ± 32	mg/kg		
Certified value	Chromium (Cr)	[7440-47-3]	10,2 ± 0,6	mg/kg		
Reference value	Chromium picolinate (as Cr)		9,7 ± 0,4	mg/kg		
Certified value	Cobalt (Co)	[7440-48-4]	0,573 ± 0,046	mg/kg		
Certified value	Copper (Cu)	[7440-50-8]	98 ± 4	mg/kg		
Reference value	Iodine (I)	[7553-56-2]	29 ± 8	mg/kg		
Certified value	Iron (Fe)	[7439-89-6]	3560 ± 280	mg/kg		
Certified value	Lead	[7439-92-1]	0,064 ± 0,008	mg/kg		
Certified value	Magnesium (Mg)	[7439-95-4]	18 500 ± 1600	mg/kg		
Certified value	Manganese (Mn)	[7439-96-5]	389 ± 20	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]	19 000 ± 800	mg/kg		
Certified value	Potassium (K)	[7440-09-7]	12 100 ± 1000	mg/kg		
Certified value	Selenium (Se)	[7782-49-2]	4,2 ± 1,4	mg/kg		
Reference value	Selenomethionine	[1464-42-2]	3,0 ± 1,2	mg/kg		
information	Sodium (Na)	[7440-23-5]	1000	mg/kg		
information	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]	0,118 ± 0,021	µg/tablet		
Certified value	Boron (B)	[7440-42-8]	215 ± 26	µg/tablet		
Reference value	Bromine (Br)	[7726-95-6]	0,73 ± 0,21	µg/tablet		

information	Cadmium (Cd)	[7440-43-9]	0,05	µg/tablet
Certified value	Calcium	[7440-70-2]	73 400 ± 11 400	µg/tablet
Reference value	Chlorine (Cl)	[7782-50-5]	571 ± 83	µg/tablet
Certified value	Chromium (Cr)	[7440-47-3]	26,1 ± 1,6	µg/tablet
Reference value	Chromium picolinate (as Cr)		25 ± 1,1	µg/tablet
Certified value	Cobalt (Co)	[7440-48-4]	1,471 ± 0,122	µg/tablet
Certified value	Copper (Cu)	[7440-50-8]	252 ± 11	µg/tablet
Reference value	Iodine (I)	[7553-56-2]	75 ± 21	µg/tablet
Certified value	Iron (Fe)	[7439-89-6]	9140 ± 740	µg/tablet
Certified value	Lead	[7439-92-1]	0,164 ± 0,021	µg/tablet
Certified value	Magnesium (Mg)	[7439-95-4]	47 500 ± 4200	µg/tablet
Certified value	Manganese (Mn)	[7439-96-5]	1000 ± 55	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]	48 800 ± 2300	µg/tablet
Certified value	Potassium (K)	[7440-09-7]	31 000 ± 2600	µg/tablet
Certified value	Selenium (Se)	[7782-49-2]	10,8 ± 3,6	µg/tablet
Reference value	Selenomethionine	[1464-42-2]	7,8 ± 3,1	µg/tablet
information	Sodium (Na)	[7440-23-5]	2560	µg/tablet
information	Strontium (Sr)	[7440-24-6]	22	µg/tablet
Certified value	Zinc (Zn)	[7440-66-6]	6060 ± 240	µg/tablet
information	Ascorbic acid	[50-81-7]	11 190	mg/kg
information	alpha Tocopherol		1760	mg/kg
Reference value	Biotin	[58-85-5]	7,9 ± 0,4	mg/kg
information	beta Carotene		60	mg/kg
Certified value	Cyanocobalamin	[68-19-9]	2,4 ± 0,4	mg/kg
information	Ergocalciferol	[50-14-6]	0,06	mg/kg
Reference value	Folic acid	[59-30-3]	76 ± 6	mg/kg
information	Lutein	[127-40-2]	0,7	mg/kg
Reference value	Niacinamide	[98-92-0]	3840 ± 172	mg/kg
Reference value	Pantothenic acid		1940 ± 120	mg/kg
information	Phylloquinone	[84-80-0]	6	mg/kg
Reference value	Pyridoxine HCl		390 ± 40	mg/kg
information	Retinol acetate		50	mg/kg
Reference value	Riboflavin	[83-88-5]	342 ± 24	mg/kg
Reference value	Thiamine HCl		290 ± 40	mg/kg
information	Ascorbic acid	[50-81-7]	28 740	µg/tablet

information	alpha Tocopherol		4530	µg/tablet
Reference value	Biotin	[58-85-5]	20,2 ± 1,1	µg/tablet
information	beta Carotene		160	µg/tablet
Certified value	Cyanocobalamin	[68-19-9]	6,3 ± 1,0	µg/tablet
information	Ergocalciferol	[50-14-6]	0,15	µg/tablet
Reference value	Folic acid	[59-30-3]	195 ± 16	µg/tablet
information	Lutein	[127-40-2]	01,07,2019	µg/tablet
Reference value	Niacinamide	[98-92-0]	9860 ± 480	µg/tablet
Reference value	Pantothenic acid		4990 ± 320	µg/tablet
information	Phylloquinone	[84-80-0]	15	µg/tablet
Reference value	Pyridoxine HCl		1010 ± 100	µg/tablet
information	Retinol acetate		120	µg/tablet
Reference value	Riboflavin	[83-88-5]	878 ± 64	µg/tablet
Reference value	Thiamine HCl		750 ± 100	µg/tablet