Concentrace Label and Toxicity Information

Mineral	Concen-Trace Label Claim	Average	Units	Actual ranges Low	High	amount per (.5tsp) daily dose Concentrace	Units	USRDI	Tolerance/ Toxicity level	Quality Comtrol's allowed concentrations	Daily dietary intakes per adult person per day	Units	Amount in Human Body
Aluminum	Trace	< 0.5	ppm	dl < 0.05	< 1	<1.2	mcg	*	*	<1 ppm	9000-20000(5)	mcg	*
Antimony	Trace	0.16	ppm	0.04	0.59	0.39	mcg	*	2ppm(4)	*	23-100(4)	mcg	7.9mg(4)
Arsenic	Trace	2.07	ppm	0.13	4.10	5.11	mcg	*	3500ug/day(4)	*	*	mcg	21mg(4)
Barium	Trace	0.08	ppm	0.0081	0.12	0.19	mcg	*	1ppm(4)	*	180-720(4)	mcg	16 mg(4)
Beryllium	Trace	0.01	ppm	0.0080	0.02	0.03	mcg	*	*	*	100(3)	mcg	6.3mg-95.2mg(4)
Bismuth	Trace	0.05	ppm	0.024	0.080	0.13	mcg	*	*	*	*	mcg	*
Boron	0.41mg/ml	0.66	*mg/ml*	162	818	1.64	mg	*	<10mg/day(3)	>.5mg/ml	0.1-20mg(4)	mg	20-100ppmdryweight(4)
Bromide	Trace	1.50	*mg/ml*	1300	1830	3.70	mg	*	*	*	7-70mg	mg	240mg(6)
Cadmium	Trace	< 0.5	ppm	dl < 0.001	< 0.5	<1.2	mcg	*	<16ppm(5)	<.5 ppm	25-60ug(6)	mcg	11mg(6)
Calcium	Trace	0.07	*mg/ml*	4.1000	491.00	0.17	mg	1000	2500(3)mg/day	*	530-1179(2)	mg	1200g(2)
Carbonate	Trace	2.97	*mg/ml*	1100	4801	7.31	mg	*	*	*	*	mg	*
Cerium	Trace	0.06	ppm	0.0041	0.16	0.16	mcg	*	Low Toxciity(4)	*	*	mcg	*
Cesium	Trace	0.05	ppm	0.012	0.12	0.13	mcg	*	<1329ug/day(4)	*	*	mcg	*
Chloride	284.1mg/ml	303.60	*mg/ml*	284.4	317.7	748.1	mg	3400		>262 mg/ml	6000(2)	mg	71g(6)
Chromium	Trace	1.11	ppm	0.14	3.33	2.73	mcg	120	250ug/day(2)	*	25-200(2)	mcg	5-10mg(4)
Cobalt	Trace	0.91	ppm	0.0081	2.56	2.24	mcg	*	<200mg/day(4)	*	40-50(4)	mcg	1.8mg(6)
Copper	Trace	0.0003	*mg/ml*	0.00002	0.0024	0.00	*mg*	2	10-12mg/day(2)	*	2-5(2)	*mg*	50-120mg(4)
Dysprosium	Trace	0.01	ppm	0.0041	0.012	0.02	mcg	*	Low Toxciity(4)	*	*	mcg	*
Erbium	Trace	0.01	ppm	0.0041	0.0081	0.01	mcg	*	Low Toxciity(4)	*	*	mcg	*
Europium	Trace	0.01	ppm	0.0041	0.0093	0.01	mcg	*	Low Toxciity(4)	*	*	mcg	*
Flouride	Trace	0.06	*mg/ml*	0.00002	0.2	0.15	mg	*	5-10mg/day(2)	*	.9-1.7mg(2)	mg	1.9g(6)
Gadolinium	Trace	0.006	ppm	0.0041	0.0093	0.01	mcg	*	Low Toxciity(4)	*	*	mcg	*
Gallium	Trace	0.03	ppm	0.0041	0.11	0.08	mcg	*	*	*	*	mcg	*
Germanium	Trace	0.07	ppm	0.0010	0.32	0.18	mcg	*	1500ug/day(3)	*	.4-3.4mg(3)	mcg	30mg(6)
Gold	Trace	0.02	ppm	0.012	0.020	0.04	mcg	*	*	*	*	mcg	*
Hafnium	Trace	0.012~	ppm			0.03	mcg	*	*	*	*	mcg	*
Holmium	Trace	0.01	ppm	0.0041	0.0081	0.015	mcg	*	Low Toxciity(4)	*	*	mcg	*
Indium	Trace	< 0.012~	ppm			0.03	mcg	*	*	*	*	mcg	*
Iodine	Trace	2.72	ppm	0.0041	21	6.7	mcg	150	2000ug/day(2)	*	170-250(2)	mcg	12.6 mg(6)
Iron	Trace	0.0002	*mg/ml*	0.0001	0.003	0.0004	*mg*	18	75mg/day(2)	*	10.7(2)	*mg*	300-1000mg(2)
Lanthanum	Trace	0.10	ppm	0.0081	0.18	0.24	mcg	*	Low Toxciity(4)	*	*	mcg	*
Lead	Trace	< 0.1	ppm	< 0.002	< 0.5	0.25	mcg	*	*	<.5 ppm	*	mcg	2-200mg(4)
Lithium	0.61mg/ml	0.76	*mg/ml*	0.531	0.91	1.87	mg	*	<1g/day(4)	>.5 mg/ml	.010-2(3)	mg	4mg(6)
Lutetium	Trace	0.01	ppm	0.0041	0.0081	0.015	mcg	*	Low Toxciity(4)	*	*	mcg	*
Magnesium	101.46mg/ml	101.50	*mg/ml*	100.0	113.2	250.1	mg	400	<15g/day(4)	>96 mg/ml	190-420(2)	mg	20-28g(2)
Manganese	Trace	0.001	*mg/ml*	0.00002	0.003	0.002	*mg*	2	10mg/day(2)	*	2-8(4)	*mg*	*
Mercury	Trace	< 0.05	ppm	< 0.00081	< 0.05	<0.12	mcg	*	<50ug/day(4)	<0.1ppm	4-443(4)	mcg	*

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References

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3. Schauss, Alexander G. 1995. Minerals, Trace Elements, & Human Health. Life Sciences Press, Tacoma, WA.
4. Seiler, H.G., Sigel, H., and Sigel A. 1988. Handbook on Toxicity of Inorganic Compounds. Marcel Dekker, Inc. New York, NY.
5. Editor in Chief Philip Wexler 1998. Encyclopedia of Toxicology Academic Press. San Diego CA.
6. Earl Friedman Editor of Biochemistry of the UltraTrace Elements. Pelenum Press New York and London

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Molybdenum	Trace	0.28	ppm	0.053	0.44	0.65	mcg	75	<750ug/day(4)	*	100-300(4)	mcg	5mg(4)
Neodymium	Trace	0.01	ppm	0.0041	0.0081	0.015	mcg	*	Low Toxcilty(4)	*	*	mcg	*
Nickel	Trace	0.58	ppm	0.11	1.04	1.39	mcg	*	*	*	300-600(3)	mcg	9.3mg(8)
Niobium	Trace	0.0041~	ppm			0.01	mcg	*	*	*	600(4)	mcg	100g(4)
Nitrogen	Trace	39.94	ppm	1.71	112	98.4	mcg	*	*	*	*	mcg	1400g(6)
Palldium	Trace	< 0.012~	ppm			<0.03	mcg	*	*	*	*	mcg	*
Phosphorus	Trace	0.006	mg/ml	0.013	26	0.02	mg	*	<1to2 Ca to P(2)	*	1000-1500(3)	mg	800g(2)
Platinum	Trace	0.0041~	ppm			0.01	mcg	*	*	*	*	mcg	*
Potassium	<4.06mg/ml	2.20	mg/ml	2.00	2.6	5.42	mg	*	18gramdose(5)	>1 mg/ml	1000-2500(2)	mg	45g(6)
Praseodymium	Trace	0.0047	ppm	0.0020	0.0081	0.012	mcg	*	Low Toxcilty(4)	*	*	mcg	*
Rhenium	Trace	0.01	ppm	0.0041	0.012	0.017	mcg	*	*	*	*	mcg	*
Rubidium	Trace	2,835	ppm	0.974	12,000	6985	mcg	*	*	*	2530(4)	mcg	32g(4)
Samarium	Trace	0.01	ppm	0.0041	0.020	0.03	mcg	*	Low Toxclity(4)	*	*	mcg	*
Scandium	Trace	1.44	ppm	0.0041	3.90	3.56	mcg	*	<8.25mgdose	*	*	mcg	*
Selenium	Trace	41.20	ppm	0.049	100	101.5	mcg	70	<750ug/day(3)	*	83-129(2)	mcg	25mg(6)
Silicon	Trace	14.90	ppm	0.11	33	36.7	mcg	*	*	*	*	mcg	19.3mg(6)
Silver	Trace	0.01	ppm	0.0041	0.020	0.03	mcg	*	<1(4)	*	35-45(4)	mcg	*
Sodium	<4.06mg/ml	2.79	mg/ml	2.3	3.7	6.9	mg	<2400	2401mg/day(2)	<4 mg/ml	18000-5000(2)	mg	91g(6)
Strontium	Trace	0.62	ppm	0.020	3.50	1.5	mcg	*	*	*	2000(4)	mcg	140mg(4)
Sulfate	22.32mg/ml	24.15	mg/ml	21.00	26.50	59.5	mg	*	*	18-27mg/ml	*	mg	*
Tantalum	Trace	0.001~	ppm			0.0025	mcg	*	<580mgdose(4)	*	*	mcg	*
Tellurium	Trace	0.18	ppm	0.081	0.30	0.45	mcg	*	*	*	*	mcg	*
Terbium	Trace	0.01	ppm	0.0041	0.0081	0.015	mcg	*	Low Toxclity(4)	*	*	mcg	*
Thallium	Trace	0.016~	ppm			0.39	mcg	*	>500mgLethalDose(4)	*	*	mcg	350mg(4)
Thorium	Trace	0.02	ppm	0.0081	0.024	0.04	mcg	*	*	*	*	mcg	*
Thulium	Trace	0.01	ppm	0.0041	0.0081	0.015	mcg	*	Low Toxclity(4)	*	*	mcg	*
Tin	Trace	0.03	ppm	0.0081	0.057	0.1	mcg	*	*	*	*	mcg	3.7mg(6)
Titanium	Trace	5.27	ppm	0.0041	16	12.98	mcg	*	*	*	300(4)	mcg	*
Tungsten	Trace	0.13	ppm	0.012	0.27	0.318	mcg	*	*	*	*	mcg	*
Uranium	Trace	0.03	ppm	0.0081	0.049	0.068	mcg	*	<500mcgdose(4)	*	1.75(4)	mcg	*
Vanadium	Trace	0.07	ppm	0.061	0.081	0.175	mcg	*	<350ugdose(3)	*	12-28(4)	mcg	100-200ug(4)
Ytterbium	Trace	0.0041~	ppm			0.01	mcg	*	Low Toxcilty(4)	*	*	mcg	*
Yttrium	Trace	0.06	ppm	0.0041	0.11	0.15	mcg	*	Low Toxcilty(4)	*	*	mcg	*
Zinc	Trace	0.0008	mg/ml	0.00001	0.005	0.002	mg	15	>2000mg/day(2)	*	10(3)	mg	2g(6)
Zirconium	Trace	0.01	ppm	0.0041	0.020	0.025	mcg	*	*	*	*	mcg	*

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5. Editor In Chief Philip Wexler 1998. Encyclopedia of Toxicology Academic Press. San Diego CA.
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