

Toxic & Essential Elements; Hair

TOXIC METALS					
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE	
				68 th	95 th
Aluminum	(Al)	1.5	< 7.0		
Antimony	(Sb)	< 0.01	< 0.066		
Arsenic	(As)	0.027	< 0.080		
Barium	(Ba)	0.29	< 1.0		
Beryllium	(Be)	< 0.01	< 0.020		
Bismuth	(Bi)	< 0.002	< 2.0		
Cadmium	(Cd)	0.021	< 0.065		
Lead	(Pb)	0.82	< 0.80		
Mercury	(Hg)	2.8	< 0.80		
Platinum	(Pt)	< 0.003	< 0.005		
Thallium	(Tl)	< 0.001	< 0.002		
Thorium	(Th)	< 0.001	< 0.002		
Uranium	(U)	0.036	< 0.060		
Nickel	(Ni)	0.31	< 0.20		
Silver	(Ag)	0.08	< 0.08		
Tin	(Sn)	0.05	< 0.30		
Titanium	(Ti)	0.21	< 0.60		
Total Toxic Representation					

ESSENTIAL AND OTHER ELEMENTS								
		RESULT µg/g	REFERENCE INTERVAL	PERCENTILE				
				2.5 th	16 th	50 th	84 th	97.5 th
Calcium	(Ca)	554	200- 750					
Magnesium	(Mg)	31	25- 75					
Sodium	(Na)	7	20- 180					
Potassium	(K)	3	9- 80					
Copper	(Cu)	64	11- 30					
Zinc	(Zn)	200	130- 200					
Manganese	(Mn)	0.14	0.08- 0.50					
Chromium	(Cr)	0.37	0.40- 0.70					
Vanadium	(V)	0.018	0.018- 0.065					
Molybdenum	(Mo)	0.010	0.025- 0.060					
Boron	(B)	0.82	0.40- 3.0					
Iodine	(I)	0.54	0.25- 1.8					
Lithium	(Li)	< 0.004	0.007- 0.020					
Phosphorus	(P)	126	150- 220					
Selenium	(Se)	0.75	0.70- 1.2					
Strontium	(Sr)	1.4	0.30- 3.5					
Sulfur	(S)	48100	44000- 50000					
Cobalt	(Co)	0.003	0.004- 0.020					
Iron	(Fe)	5.0	7.0- 16					
Germanium	(Ge)	0.033	0.030- 0.040					
Rubidium	(Rb)	< 0.003	0.011- 0.12					
Zirconium	(Zr)	0.035	0.020- 0.44					

SPECIMEN DATA		RATIOS		
COMMENTS:		ELEMENTS	RATIOS	RANGE
Date Collected: 05/16/2017	Sample Size: 0.199 g	Ca/Mg	17.9	4- 30
Date Received: 05/23/2017	Sample Type: Head	Ca/P	4.4	0.8- 8
Date Completed: 05/25/2017	Hair Color:	Na/K	2.33	0.5- 10
Methodology: ICP/MS	Treatment:	Zn/Cu	3.13	4- 20
	Shampoo:	Zn/Cd	> 999	> 800