

**CERTIFICATE OF ANALYSIS**  
**ELEMENTS: RATIO and DISTRIBUTION**  
 (Mineral Nutrients Available Shown by Chemical Analysis)

BATCH 042308  
 ION-MIN premium  
 montmorillonite brands:  
 TERRAMIN, Terrasilk,  
 Terrabathe, Nutramin and  
 Terrapond

**INERT ELEMENTS**

**California Earth Minerals**

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Element	Formula/Symbol	Ratio
Aluminum Oxide	Al <sub>2</sub> O <sub>3</sub>	18.30%

**BIOAVAILABLE ELEMENTS**

Element	Formula/Symbol	Ratio	Element	Formula/Symbol	Ratio
Manganese	Mn <sub>2</sub> O <sub>3</sub>	0.04%	Iodine	I	< 1.0 ppb
Sulfur	SO <sub>3</sub>	0.05%	Lithium	Li	< 1.0 ppb
Iron Oxide	FeO	0.14%	Palladium	Pd	1.0 ppb
Phosphorus	P <sub>2</sub> O <sub>5</sub>	0.15%	Silver	Ag	1.0 ppb
Titanium	TiO <sub>2</sub>	0.68%	Holmium	Ho	1.04 ppm
Sodium	Na <sub>2</sub> O	1.13%	Europium	Eu	1.1 ppm
Potassium	K <sub>2</sub> O	2.80%	Terbium	Tb	1.3 ppm
Magnesium	MgO	2.88%	Germanium	Ge	10.0 ppm
Ferrous Oxide	Fe <sub>2</sub> O <sub>3</sub>	4.35%	Rubidium	Rb	129.0 ppm
Calcium	CaO	4.69%	Scandium	Sc	16.0 ppm
Silica	SiO <sub>2</sub>	55.30%	Niobium	Nb	17.0 ppm
Barium	BaO	461.0 ppm	Beryllium	Be	2.4 ppm
Bismuth	Bi	5.0 ppm	Thulium	Tm	2.8 ppm
Boron	B <sub>2</sub> O <sub>3</sub>	108.0 ppm	Ytterbium	Yb	2.8 ppm
Bromine	Br	6.0 ppm	Gallium	Ga	21.0 ppm
Cesium	Cs	12.0 ppm	Yttrium	Y	28.0 ppm
Chromium	Cr <sub>2</sub> O <sub>3</sub>	100.0 ppm	Erbium	Er	3.0 ppm
Cobalt	CoO	28.0 ppm	Selenium	Se	3.0 ppm
Copper	CuO	34.8 ppm	Tungsten	W	3.0 ppm
Gold	Au	5.0 ppb	Hafnium	Hf	4.0 ppm
Lanthanum	La	45.0 ppm	Dysprosium	Dy	4.8 ppm
Molybdenum	Mo	3.0 ppm	Neodymium	Nd	42.0 ppm
Nickel	NiO	51.0 ppm	Arsenic Oxide	As	5.0 ppm
Platinum	Pl	11.0 ppb	Cadmium	Cd	5.0 ppm
Strontium	SrO	205.0 ppm	Lead	Pb	5.0 ppm
Tantalum	Ta	2.0 ppm	Gadolinium	Gd	5.6 ppm
Thorium	Th	15.0 ppm	Samarium	Sm	6.8 ppm
Tin	Sn	5.0 ppm	Cerium	Ce	79.0 ppm
Vanadium	V <sub>2</sub> O <sub>5</sub>	127.0 ppm	Praseodymium	Pr	9.1 ppm
Zinc	Zn	97.3 ppm	Mercury	Hg	None
Zirconium	ZrO <sub>2</sub>	143.0 ppm	Nitrate	NO <sub>3</sub>	None