

Source X[®]

Leonardite, a natural form of humate, mined from Stoney Creek Mine

Leonardite Products Target Moisture: 24-28%

Radwag PMC 50/NH Moisture Analyzer Balance

Bulk Density: 51 pounds per cubic foot (816.94 kg/m³ metric equivalent)

Typical Data - Random Sample

Properties	As Received	Dry Weight
Moisture	24.50%	
Total Solids	75.5%	
Organic Matter	58.60%	77.62%
Ash	16.9%	22.38%
C:N Ratio	40:1	
Total Carbon	35.80%	49.42%
pH	3.7	

Nutrients	As Received	Dry Weight
Nitrogen (N)		
Total	0.90%	1.19%
Organic (N)	0.87%	1.15%
Ammonium Nitrogen (N)	0.004%	0.005%
Nitrate Nitrogen (N)	0.03%	0.04%
Sulfur (S)	1.55%	2.05%
Calcium (C)	2.07%	2.74%
Magnesium (Mg)	0.81%	1.07%
Sodium (Na)	0.19%	.252%

Micro Nutrients	As Received	Dry Weight
Iron (Fe)	13900 ppm	18411 ppm
Manganese (Mn)	123 ppm	163 ppm
Zinc (Zn)	27.6 ppm	37 ppm
Copper (Cu)	<20 ppm	
Boron (B)	213 ppm	282 ppm

Analysis above conducted by Midwest Laboratories, Inc. July 2020

Humic Acid Analysis by Mottz Laboratory, Inc., Phoenix, AZ, June 2020

Humic Acid	59.53%	ISO 19822
Hydrophobic Fulvic Acid Fraction	3.64%	ISO 19822

Humic Acid Analysis by Thornton Laboratories., Tampa, FL, May 2020

Humic Acid	55.86%	ISO 19822
Fulvic Acid	7.56%	ISO 19822

Humic Acid Analysis by A & L Western Agricultural Laboratories Inc., Modesto, CA, Aug 2020

Humic Acid	77.25%	A&L Colormetric method, August 2020
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Humic Acid Analysis by Midwest Labs, Omaha, NE, February 2021

Humic Acid	60.32%	Calif HA/JC (rev 2:3-11-09)
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Ammonium Nitrogen, Nitrate Nitrogen, Phosphorous P205, Potassium K20, Magmesium, Chloride <1%.

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