



## Certificate of Analysis Humic/ Fulvic Acid Powder

### Humic/ Fulvic Acids: ISO Method

Test	Method	Result	Units
Humic Acid	HPTA	>64	%
Hydrophobic Fulvic Acid	HPTA	>3.04	%
Humic Substances	Colorimetric	>98	%

### C:N Ratio

Test	Method	Result	Units
Total Carbon, C	415.1	44	%
Total Nitrogen	AOAC 993.13	1.2	%
C:N	Calculated	37 to 1	

### Fertilizer

Test	Method	Result	Units
pH	150.1	8.9	SU
Electrical Conductivity, EC	120.1	24	dS/m
Ash	ASTM D 2974	31	%
Cation Exchange Capacity, CEC	9081	340	meq/ 100g
Organic Matter (Total)	ASTM D 2974-87	62	%
Total Organic Carbon	415.1	37	%
Water Solubility	Gravimetric	89	%
Moisture	ASTM D 2974	5.6	%

### Heavy Metals (ALL)

Test	Method	Result	Units
Arsenic, AS	3051A/6020B	3.2	ppm
Cadmium, Cd	3051A/6020B	0.19	ppm
Cobalt, Co	3051A/6020B	3.6	ppm
Copper, Cu	3051A/6020B	5.7	ppm
Lead, Pb	3051A/6020B	3.5	ppm
Mercury, Hg	3051A/6020B	<0.10	ppm
Molybdenum, Mo	3051A/6020B	1.8	ppm
Nickel, Ni	3051A/6020B	13	ppm
Selenium, Se	3051A/6020B	2.8	ppm
Zinc, Zn	3051A/6020B	18	ppm



## Complete Analysis

### Test

Total Nitrogen, N	AOAC 993.13	1.2	%
Phosphorus, P205	AOAC 2015.18	0.036	%
Potassium, K2O	AOAC 2015.18	15.5	%
Calcium, Ca	AOAC 965.09ICP	1.6	%
Magnesium, Mg	AOAC 965.09ICP	0.19	%
Sodium, Na	AOAC 965.09ICP	0.31	%
Sulfur, S	AOAC 2006.03	0.69	%
Iron, Fe	AOAC 965.09ICP	4330	ppm
Zinc, Zn	AOAC 965.09ICP	15	ppm
Manganese, Mn	AOAC 965.09ICP	140	ppm
Copper, Cu	AOAC 965.09ICP	3.5	ppm
Boron, B	AOAC 982.01ICP	140	ppm

Motzz Laboratory Inc.

Reported

10-Mar-23