

CERTIFICATE OF ANALYSIS



PRODUCT INFORMATION

Product Name:	Fulvic Acid Powder
Product Code:	E18NP
Product Lot Number:	22H08-1109-E18NP
Manufacture Date:	August 08, 2022
Specification	SP-E18NP
Manufacturer:	FulvicXcell Products Ltd.
Product Matrix	Powder

Composition	Organic Humic and Fulvic Acids (Aqueous Extracts of Humalite); RO Water;
Storage Conditions:	Ambient—room temperature (10 – 25 C), do not freeze; open in dry location; avoid prolonged exposure to direct sunlight.
Retest Date:	August 2027
Location of Production Facility:	West Kelowna, British Columbia, Canada
Origin of Humic Substances:	Alberta, Canada

QUALITY & PURITY

Physical Attributes

Parameter	Test Method	Tolerance	Result
Appearance	Organoleptic	brown to dark brown, shiny to dull, fine powder	Within Tolerance
pH	Electrometry	4.0-6.0	4.81
Moisture	Vacuum Methd (AOAC 925.45D)	≤ 10%	1.88 %
Hydrophobic Fulvic Content	Lamar Method (AOAC Vol.97)	N/A	20.50%
Hydrophobic Humic Content	Lamar Method (AOAC Vol.97)	N/A	6.90%

Microbiological Contaminants

Parameter	Test Method	Tolerance	Unit	Result
Aerobic Plate Count	Current USP/NF, 2021	≤ 1,000	CFU/g	170 CFU/g
Mold and Yeast (combined)	Current USP/NF, 2021	≤ 100	CFU/g	<20 CFU/g
E. coli	Current USP/NF, 2022	Absent	Per 10g	Absent
Salmonella	Current USP/NF, 2022	Absent	Per 25g	Absent
Staphylococcus aureus	Current USP/NF, 2022	Absent	Per 10g	Absent
Pseudomonas aeruginosa	Current USP/NF, 62	Absent	Per 10g	Absent

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Heavy Metal Impurities

<i>Parameter</i>	<i>Test Method</i>	<i>Tolerance (mg/kg)</i>	<i>Result (mg/kg)</i>
Arsenic	ICP-OES/ICP-MS	5.0	1.5
Cadmium	ICP-OES/ICP-MS	0.3	0.0
Lead	ICP-OES/ICP-MS	10.0	0.4
Mercury	ICP-OES/ICP-MS	0.2	0.0

Mineral Content

<i>Parameter</i>	<i>Test Method</i>	<i>Tolerance</i>	<i>Result (mg/kg)</i>
Aluminum	EPA 6020B (ICP-MS)	Report Results	639
Antimony	EPA 6020B (ICP-MS)	Report Results	0.22
Barium	EPA 6020B (ICP-MS)	Report Results	9.38
Beryllium	EPA 6020B (ICP-MS)	Report Results	0.10
Bismuth	EPA 6020B (ICP-MS)	Report Results	<0.02
Boron	EPA 6020B (ICP-MS)	Report Results	396
Calcium	EPA 6020B (ICP-MS)	Report Results	8500
Chromium	EPA 6020B (ICP-MS)	Report Results	1.70
Cobalt	EPA 6020B (ICP-MS)	Report Results	1.83
Copper	EPA 6020B (ICP-MS)	Report Results	3.20
Iron	EPA 6020B (ICP-MS)	Report Results	265
Lithium	EPA 6020B (ICP-MS)	Report Results	40.9
Magnesium	EPA 6020B (ICP-MS)	Report Results	1820
Manganese	EPA 6020B (ICP-MS)	Report Results	99.4
Molybdenum	EPA 6020B (ICP-MS)	Report Results	0.33
Nickel	EPA 6020B (ICP-MS)	Report Results	5.18
Phosphorus	EPA 6020B (ICP-MS)	Report Results	23
Potassium	EPA 6020B (ICP-MS)	Report Results	286000
Selenium	EPA 6020B (ICP-MS)	Report Results	2.0
Silver	EPA 6020B (ICP-MS)	Report Results	<0.02
Sodium	EPA 6020B (ICP-MS)	Report Results	39900

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Mineral Content

Parameter	Test Method	Tolerance	Result (mg/kg)
Strontium	EPA 6020B (ICP-MS)	Report Results	51.7
Thallium	EPA 6020B (ICP-MS)	Report Results	0.18
Tin	EPA 6020B (ICP-MS)	Report Results	0.13
Titanium	EPA 6020B (ICP-MS)	Report Results	40.1
Uranium	EPA 6020B (ICP-MS)	Report Results	0.11
Vanadium	EPA 6020B (ICP-MS)	Report Results	5.55
Zinc	EPA 6020B (ICP-MS)	Report Results	25.6
Zirconium	EPA 6020B (ICP-MS)	Report Results	16.1

Glossary

CFU = Colony Forming Unit
EPA = (United States) Environmental Protection Agency
USP/NF = United States Pharmacopeia / The National Formulary

PRODUCT RELEASE

Conformance to Tolerances

Parameters (Specifications)	PASS
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Approval

Approved By	Signature
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Faezeh Dousty
Quality Assurance Manager

A handwritten signature in black ink, appearing to read "F. Dousty", written over a horizontal line.

September 08, 2022