NATURE SCIENCE TECHNOLOGIES

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CERTIFICATE OF ANALYSIS

Betulinic acid

LOT EX0212

Catalog No.: NST-10-61

CAS No.: 472-15-1

Molecular formula: $C_{30}H_{48}O_3$

MW: 456.70

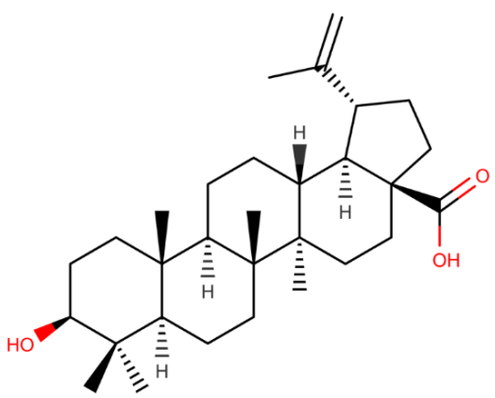
Botanical name: *Betula platyphylla*

Part used: bark

Manufacturing date: 16.04.2025

Analysis date: 28.04.2025

Shelf life: 24 months



No.	Parameter	Specification	Results	Method
1.	Appearance	Fine powder	Conforms	Visual
2.	Color	White	Conforms	Visual
3.	Odor	Characteristic	Conforms	Organoleptic
4.	Taste	Characteristic	Conforms	Organoleptic
5.	Mesh size/sieve	≥95 % pass 80 mesh	Conforms	80 mesh
6.	Bulk density	≤0.8 g/mL	Conforms	USP <616>
7.	Loss on drying	≤5.0 %	0.33%	USP <731>
8.	Residue on ignition	≤2.0 %	1.78%	USP <281>
9.	Identification	Complies with standard	Conforms	TLC
10.	Assay	≥98.0 %	98.41%	HPLC

11.	Pesticide residues	USP<561>	Conforms	Third lab
12.	Solvent residues	USP<467>	Conforms	GC
13.	Heavy Metals	≤10 ppm	Conforms	ICP-MS
14.	Lead	≤2 ppm	Conforms	ICP-MS
15.	Arsenic	≤1 ppm	Conforms	ICP-MS
16.	Mercury	≤0.1 ppm	Conforms	ICP-MS
17.	Cadmium	≤1 ppm	Conforms	ICP-MS
18.	TPC	$<10^3$ CFU/g	Conforms	USP <2021>
19.	TYMC	$<10^2$ CFU/g	Conforms	USP <2021>
20.	*Escherichia Coli*	Absent	Conforms	USP <2022>
21.	*Salmonella*	Absent	Conforms	USP <2022>
22.	*Staphylococcus aureus*	Absent	Conforms	USP <2022>

Storage: store in a cool and dry place, keep away from strong light and heat

Stability: 24 months when properly stored

Issued by
Nature Science Technologies Ltd.

Signature:



Date: 28.04.2025

This Certificate of Analysis is based on the manufacturer's quality control documentation for the referenced batch.