



Certificate of Analysis

Product Name	Nano Zinc Oxide/Sea Buckthorn Co2 Extract Oil		
INCI Name:	Hippophae Rhamnoides Seed Oil		
Plant Latin	<i>Hippophae rhamnoides L.</i>	Used part	SEED
Country of Origin	The plant material originated from China.	Batch Quantity	100 kg
Batch Number	20260605	Manufacture Date	20260605
Report Date	20260605		

Items Tested	Specifications	Results	Test Method
Physical and Chemical Analysis			
Appearance	Yellow Liquid Oil	Complies	Organoleptic examination
nm Grain size, nm	15-20	Conform	Laser diffraction
SSA, m ² /g	20-60m ² /g	35.9m ² /g	BET method
g/cm ³	0.1-0.2g/cm ³	0.14g/cm ³	ASTM B329 / ISO 3923-1
105°C, 2h(%) ≤ Loss on dry	2.0	1.07	Gravimetric method
Sulphated Assay	3.0% ≤	2.23% ≤	Ignition at 800°C
Physical Characteristics			
Loss on Drying	≤ 5.00%	3.64%	USP <731> / Ph. Eur. 2.2.32
Total ash	≤ 5.00%	2.84%	USP <561>
Heavy Metals (ICP-MS)			
Lead (Pb)	≤ 10 ppm	<0.5 ppm	ICP-MS
Arsenic (As)	≤ 2 ppm	<0.1 ppm	ICP-MS
Cadmium (Cd)	≤ 1 ppm	<0.1 ppm	ICP-MS
Mercury (Hg)	≤ 1 ppm	<0.05 ppm	ICP-MS
Microbial Limits			
Total Aerobic Microbial Count	≤ 1000 CFU/g	<10 CFU/g	USP <61> / Ph. Eur. 2.6.12
Total Yeast and Mold Count	≤ 100 CFU/g	<10 CFU/g	USP <61> / Ph. Eur. 2.6.12
E. coli	Absent in 1g	Absent	USP <62> / Ph. Eur. 2.6.13
Salmonella spp.	Absent in 10g	Absent	USP <62> / Ph. Eur. 2.6.13
Pseudomonas aeruginosa	Absent in 1g	Absent	USP <62> / Ph. Eur. 2.6.13

Quality Statement: This product is manufactured under a quality system compliant with cGMP principles for both food and cosmetic applications. Specifications and test methods are established with reference to the relevant ISO Standards, Chinese National Standards (GB), United States Pharmacopeia (USP), and European Pharmacopoeia (Ph. Eur.).

For cosmetic use, the batch fully complies with the requirements of EU Cosmetic Regulation (EC) No 1223/2009, China's Safety Technical Standards for Cosmetics (2015 Edition), and U.S. FDA cosmetic GMP guidelines. For food use, the batch meets the applicable requirements of China's national food safety standards (including GB 2762, GB 2763, GB 7101) and the U.S. FDA Food Safety Modernization Act (FSMA) and applicable food additive regulations.

Storage: Store in tight, light-resistant containers. Avoid exposure to direct sunlight, moisture, and excessive heat.

Shelf Life: 24 months if stored under the above conditions and remains in original packaging.

