

Silk Peptide

TECHNICAL DATA SHEET

Hydrolyzed silk protein powder (INCI: Hydrolyzed Silk) for hair care, skin care and cleansing formulations.

CAS No.	96690-41-4
Source	Silk fibroin
Physical form	White powder
Molecular weight	500-30,000 Da
INCI name	Hydrolyzed Silk

Product Information

Silk peptide is obtained by hydrolysis of silk fibroin, the structural protein in silkworm silk. The material consists of peptide components and is supplied as a white, water-soluble powder. Its chemical identity is protein hydrolyzates, silk; the cosmetic ingredient name is Hydrolyzed Silk.

The specified molecular-weight range is 500–30,000 Da, and the product specification covers nitrogen content, drying loss, ignition residue, pH, selected heavy metals and microbiological quality. The powder is used as an ingredient in hair care, skin care, cleansing and oral care formulations. Dissolve in the aqueous phase with mixing and evaluate incorporation in the intended formulation.

Specifications

Parameter	Specification
Total nitrogen	≥14.5%
Loss on drying	≤5%
Residue on ignition	≤4%
pH	4.5-6.5
Molecular weight	500-30,000 Da
Lead (Pb)	≤0.5 mg/kg
Arsenic (As)	≤0.5 mg/kg
Mercury (Hg)	≤0.2 mg/kg
Total bacterial count	≤1,000 CFU/g
Pathogenic bacteria	Not detected

Typical values. The COA of each batch prevails.

Typical Properties & Commercial Information

Chemical identity	Protein hydrolyzates, silk
INCI name	Hydrolyzed Silk
Solubility	Water soluble
Supply	On request
MOQ	500 kg
Lead time	15-20 days
Free sample	500 g
Incoterms	FOB / CFR / CIF
HS Code	3504.00 (for reference)

Applications

Hair care: Ingredient for shampoos, conditioners, hair masks and leave-in formulations. Hydrolyzed Silk is used for hair-conditioning and antistatic functions. The water-soluble powder can be introduced through the aqueous phase with suitable mixing.

Skin care: Ingredient for creams, lotions, serums and facial masks. Its cosmetic ingredient functions include skin conditioning and humectancy. Incorporate into the aqueous phase and evaluate the finished formula for appearance, stability and processing compatibility.

Cleansing formulations: Ingredient for facial cleansers, body washes and soaps. Silk peptide can be evaluated as a silk-derived protein hydrolysate in aqueous cleansing systems, with incorporation and processing conditions selected for the specific formulation.

Oral care: Ingredient for toothpaste formulations, as identified in the product technical literature. Evaluate the water-soluble powder in the intended formulation, including mixing, appearance and stability during the product development process.

Packaging & Storage

Packaging	20 kg/bag
Storage	Keep in a cool, dry place, away from strong light and heat.
Shelf life	2 years in unopened original packaging.
Handling	Avoid dust formation during weighing and transfer. Keep packaging closed when not in use; reseal promptly after opening to reduce exposure to moisture.

Certifications & Documents

HACCP · HALAL · KOSHER · ISO 9001 · GMP

A batch Certificate of Analysis (COA) is supplied with the shipment. Technical Data Sheet (TDS), Safety Data Sheet (SDS) and certificate of origin are available to support product identification, handling and import documentation.

Company Contact

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The agreed purchase specification and the COA of each batch govern supply.