

TECHNICAL DATA SHEET

Effective date: 04.2019
Rev.1

Silk Protein

INFORMATION ON SUBSTANCE / MIXTURE

INCI	Aqua, Silk amino acids
Description	Protein derivatives are a range of functional materials manufactured by the hydrolysis of pure silk fibers under carefully controlled conditions, composed principally of the free amino acids occurring in silk. As naturally hygroscopic materials silk amino acids exhibit excellent moisture binding properties, producing a deep conditioning effect on skin and improving the softness and handling characteristics of hair.
Raw material category	Active ingredient, conditioning agent

TECHNICAL DATA

Composition

Typical amino acid profile	% w/w
Alanine	28.4
Arginine	1.5
Aspartic acid	4.7
Cystine	0.1
Glutamic acid	4.1
Glycine	34.7
Histidine	0.8
Isoleucine	0.8
Leucine	1.2
Lysine	1.4
Methionine	0.2
Phenylalanine	0.9
Proline	1.2
Serine	15.4
Threonine	1.9
Tyrosine	0.6
Valine	2.0

TECHNICAL DATA SHEET

Effective date: 04.2019
Rev.1

Silk Protein

Physical parameters

Appearance	Liquid				
Color	Yellow to amber				
Odor	Characteristic, mild				
pH	3,7 - 4,5				
Nitrogen	1,8 - 2,5 %				
Protein (N x 6.25)	11,2 – 15,6 %				
Total solids	27,0 - 31,0 %				
Total ash	12,0 – 16,0 %				
Molecular weight	150				
Solubility	Soluble in water, insoluble in oil and ethanol				
	% Addition level	Water	Ethanol/ water 25:75	Ethanol/ water 50:50	Ethanol/ water 75:25
	1.0	Soluble	Soluble	Soluble	Insoluble
	2.0	Soluble	Soluble	Soluble	Insoluble
At pH 7.0					

Biological parameters

Total plate count	Max 100 cfu/g
Yeasts and molds	Max 100 cfu/g
Gram negative bacteria	Absent/ g
Staphylococcus aureus	Absent/ g

TRANSPORT, STORAGE and SHELF LIFE

Storage conditions	Store in tightly closed original container, protected from light and moisture. May precipitate during storage.
Shelf Life	36 months under good storage conditions
Custom tariff	-

TECHNICAL DATA SHEET

Effective date: 04.2019
Rev.1

Silk Protein

DISCLAIMER

All warranty claims in respect to the conformity of our product are subject to our General Terms and Conditions of Sale and Delivery. The data listed above reflects the results of the manufacturer or our supplier quality tests. We do not hereby make any express or implied warranty, whether for specific properties or for fitness for any particular application or purpose. All values are valid for the product when dispatched from the works. We recommend you perform your own quality and or identification checks on receipt.