

PROSOJA HD SP

CHEMICAL NAME: Hydrolyzed Soybean Protein.

INCI name ⁽¹⁾	CAS number ⁽¹⁾	EINECS number ⁽¹⁾
Hydrolyzed Soy Protein	68607-88-5	271-770-5
Aqua	7732-18-5	231-791-2
Tetrasodium EDTA	64-02-8	200-573-9
Sodium Benzoate	532-32-1	208-534-8
Potassium Sorbate	24634-61-5 / 590-00-1	--- / 246-376-1

(1) Reference: (<http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.simple>), CosIng, Europe.

INCI name ⁽²⁾	CAS number ⁽²⁾	EINECS number ⁽²⁾
Hydrolyzed Soy Protein	68607-88-5	271-770-5
Water	7732-18-5	231-791-2
Tetrasodium EDTA	64-02-8	200-573-9
Sodium Benzoate	532-32-1	208-534-8
Potassium Sorbate	24634-61-5 / 590-00-1	--- / 246-376-1

(2) Reference: Personal Care Products Council. Available at: <https://incipedia.personalcarecouncil.org/winci/ingredient-custom-search/>, USA.

INTRODUCTION

Hydrolyzed vegetable proteins are substances obtained from cereal grains. The protein is broken down into amino acids by a refined hydrolysis process. The method aims the obtainment of a clear solution that contains part of the functional properties of the original protein.

When incorporated in skin care products, **PROSOJA HD-SP** increases the ability to retain moisture and provides smoothing effect. **PROSOJA HD-SP** is also suitable for incorporation in hair care products, imparting shine, and manageability to hair.

DEFINITION

PROSOJA HD-SP is an aqueous solution of derivatives of soy protein peptides, carefully handled to guarantee the maintenance of the hydrolyzed proteins functional properties. The hydrolysis process enables a proper distribution of the peptides molecular weight for application in cosmetics.

SPECIFICATIONS

Appearance (25°C)	: Liq. Of low visc, limp. to opal
Color	: Yellow to amber
Odor	: Characteristic
Density (25°C)	: 1.000 – 1.060 g/ml
Refractive index (25°C)	: 1.320 – 1.380
pH 100% (25°C)	: 3.0 – 5.0
Dry residue (2g/4hr/105°C)	: Min. 7%
Bacteria	: Max. 100 cfu/g
Moulds	: Max. 100 cfu/g
<i>Staphylococcus aureus</i> (USP)	: Negative
Gram Negative Bacilli (USP)	: Negative

OTHER AVAILABLE INFORMATION

Solubility	: Soluble in water, propylene glycol and glycerin; insoluble in ethanol.
Total nitrogen (Kjedhal)	: 0.6 – 0.8%
Identification	: a) positive reaction to nihidine. b) positive reaction to biuret. c) spectroscopy UV – according to standard

ACTION / UTILIZATION

Skin and hair are composed of proteins, and proteins are formed by peptides – amino acids polymers with a specific distribution and composition. Since **PROSOJA HD-SP** is a hydrolyzed protein, it has tissue compatibility. Its peptides, when in contact with hair and skin proteins, are adsorbed.

In hair care, this product has shown to form a protective layer around the fiber, shielding it from environmental influences and harmful substances. Adsorption occurs preferentially in zones where the hair is most vulnerable. It increases moisture retention and imparts a healthy gloss to hair.

PROSOJA HD-SP has restorative effect and forms a protective conditioning film on the skin, reducing water loss. Source of biological precursors, it also improves elasticity and has emollient property.

SUGGESTED APPLICATIONS

- Hair tincture and straightener 0.5 – 2%
- Hair treatment creams and conditioners 3 – 5 %
- Hair lotions 1 – 2%
- Shampoos 1 – 3%
- Body and face creams 1 – 5%

PROSOJA HD-SP may be incorporated into:

- Aqueous solutions: must be first added to water or surfactant before incorporating other raw material.
- Emulsions: must be incorporated in the aqueous phase, with the other water soluble raw materials.
- OBS.: may be processed hot (up to 80°C, and for no longer than 30 minutes).

INCOMPATIBILITY

PROSOJA HD-SP is compatible with most cosmetic raw materials. However, aldehydes and ketone should be avoided (they should prejudice solubility and odor).

STABILITY / STORAGE

Steady product if stored in ambient temperature (8 to 35°C). Store dry and tightly closed, protected from sunlight.

Note: During storage it may get turbid and/or precipitate, but this will not invalidate the product.

SHELF LIFE

Twenty-four (24) months from manufacturing date.

REFERENCES

- 1) *CosIng*, Europe (<http://ec.europa.eu/consumers/cosmetics/cosing/index.cfm?fuseaction=search.simple>)
- 2) Personal Care Products Council; *Online International Cosmetic Ingredient Dictionary & Handbook (wINCI)*; Copyright© 2008 Personal Care Products Council. Available at: <https://incipedia.personalcarecouncil.org/winci/ingredient-custom-search/>, USA.. Accessed in: May, 01, 2023.