Technical Data Sheet

PRODUCT NAME: iPROT WHEAT
INCI NAME: Hydrolyzed Wheat Protein
CAS No: 94350-06-8 / 222400-28-4 / 70084-87-6

GENERAL INFORMATION:

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 of the original protein.

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

DEFINITION

iPROT WHEAT is an aqueous solution of derivatives of wheat 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:

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (25°C)</td>
<td>Liquid limpid to opalescent</td>
</tr>
<tr>
<td>Color</td>
<td>Pale yellow to ocher</td>
</tr>
<tr>
<td>Density (25°C)</td>
<td>1.000 – 1.060</td>
</tr>
<tr>
<td>Refractive Index (25°C)</td>
<td>1.33 – 1.37</td>
</tr>
<tr>
<td>pH (100 %, 25°C)</td>
<td>4.0 – 6.0</td>
</tr>
<tr>
<td>Microbiology TPC</td>
<td>Max. 100 Col/g</td>
</tr>
<tr>
<td>Microbiology Mold &amp; Yeast</td>
<td>Max. 100 Col/g</td>
</tr>
</tbody>
</table>

*These values indicate typical specification; they are not intended to be used as product specifications.*

PROPERTIES AND APPLICATIONS

Skin and hair are composed by proteins, and proteins are formed by peptides – amino acids polymers with a specific distribution and composition. Since PROTRIGO 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 been 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.

iPROT WHEAT 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.

END APPLICATION & DOSAGE:

- Hair tincture and straightener 0.5 – 2 %
- Hair treatment creams and conditioners 3 – 5 %
- Hair lotions 1 – 2 %
- Shampoos 3 – 5 %
- Bathing foams and soaps 5 – 10 %
- Body and face creams 1 – 5 %
- Dermatological formulations 7 – 10 %
iPROT WHEAT 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.
- Alcoholic solutions: may be incorporated in hydro alcoholic formulations (maximum 40% V/V alcohol content). Final product must be filtered after a minimum of 48 hours rest.

Note: May be processed hot.

PRESERVATION

iPROT WHEAT is preserved with potassium sorbate (0.2%) and sodium benzoate (0.1%). Final formulation may contain a preservative other than aldehyde or its derivative.

INCOMPATIBILITY

iPROT WHEAT 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 35º C). Store dry and tightly closed, protected from sunlight.

SHELF LIFE:

Valid for 24 months.

OBSERVATION: During storage it may get turbid, but this will not invalidate the product. Product topical cosmetic formulations

Version 0.0 – Dec. 2015