**Application Sheet**

Hydrosorb® products are used as viscosity and texture modifiers and thickeners. They also increase emulsion stability. All Hydrosorb® are water dispersible, and they have high moisturizing capacity. Hydrosorb® improve the sensorial perception of final formulations. The Hydrosorb® range offers choices from fully natural to synthetic to fit different formulating needs.

Hydrosorb® Cushion and Moist are transparent gels, which deliver moisture to the skin. They provide a soft and non-sticky film with a fresh after feel.

Hydrosorb® Moist is a clear gel which modifies rheology of formulations and brings moisture to the skin. It forms a soft film with a fresh after feel.

Hydrosorb® Pine is a clear gel based on wood derived cellulose. It is used as a texture and viscosity modifier. Hydrosorb® Pine delivers moisture, and it forms a soft and fresh film. As it is non-ionic, it is compatible with anionic and cationic systems. It is an excellent rheology controller for aqueous systems, has a good freeze/thaw stability, and it is compatible with all other hydrocolloids.

Hydrosorb® Rich is a viscous liquid with a rich and oily feel. It modifies texture by giving an initial, silicone-like, feel of richness, but with a fresh aqueous after feel.

Hydrosorb® Sea is a viscous liquid based on Algae Extract. It is used as a texture modifier and film former when lubricity and freshness are desired. Hydrosorb® Sea has high tolerance for electrolytes apart from some cationic ingredients.

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>INCI Name</th>
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</thead>
<tbody>
<tr>
<td>Hydrosorb® Cushion</td>
<td>Glyceryl Polymethacrylate (and) Butylene Glycol (and) Zea Mays (Corn) Starch*</td>
</tr>
<tr>
<td>Hydrosorb® Moist</td>
<td>Glyceryl Polymethacrylate (and) Propylene Glycol*</td>
</tr>
<tr>
<td>Hydrosorb® Pine</td>
<td>Water (and) Hydroxyethylcellulose*</td>
</tr>
<tr>
<td>Hydrosorb® Rich</td>
<td>Propylene Glycol (and) Glyceryl Polymethacrylate (and) PVM/MA Copolymer</td>
</tr>
<tr>
<td>Hydrosorb® Sea</td>
<td>Water (and) Algae Extract (and) Natto Gum (and) Citric Acid*</td>
</tr>
<tr>
<td>* can be preserved with a preservation system of customer’s choice</td>
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</tr>
</tbody>
</table>

**Benefits**
- moisturization
- sensorial perceptions from soft to rich
- smooth and onctuous texture
- fresh and non-tacky feel
- emulsion stability

**Properties**
- hydrophilic
- texture and rheology modifier
- heat stable apart from Hydrosorb® Cushion and Moist
Application Areas

Skin Care
All Hydrasoft® products are suitable for water-based skin care formulations for providing texture and structure. Hydrasoft® Cushion and Moist are excellent moisturizers. Hydrasoft® Rich modifies the sensorial feel of formulations giving them elegance and richness.

Sun Care
Hydrasoft® Cushion, Moist, Pine and Sea are ideal for after sun products as they bring moisture to the skin. Hydrasoft® Rich gives elegance and richness to water based systems without loosing the freshness and a cooling effect desired in after sun products.

Colour Care
All Hydrasoft® products are suitable for foundations and other colour care emulsions as viscosity and texture modifiers. Hydrasoft® Rich can be used in foundations to enhance application qualities giving an initial rich skin feel but drying off soon to a smooth and soft feel with a light film formation. Hydrasoft® Moist and Sea can be used in mascaras to increase viscosity and to enhance application properties.

Hair Care
Hydrasoft® Pine is an ideal viscosity and texture modifier for anionic and cationic hair care systems as it is itself non-ionic. Hydrasoft® Sea has a high tolerance for electrolytes, but it may precipitate with some cationic ingredients. Hydrasoft® Rich may be used to enhance the application qualities of styling products.

Formulating
Hydrasoft® products are water dispersible. They can be used in O/W emulsions and in water-based systems.

Hydrasoft® Cushion and Moist are sensitive to heat, temperatures above 40°C should be avoided. Agitation is well tolerated and alcohol tolerance is fairly good, up to 20%. pH should be kept between 5-7,5 and no electrolytes should be added to formulas containing Hydrasoft® Cushion.
Typical use level: 10 - 30%

Hydrasoft® Pine can be added into the water phase without a hydration process. Hydrasoft® Pine tolerates alcohol and electrolytes well and it is not sensitive to heat or agitation. Hydrasoft® Pine performs well in formulations with pH 3-9.
Typical use level: 10-15% in gels and emulsions, 1-5% in hair care applications

Hydrasoft® Rich can be added to the water phase before emulsification, or to the final formulation after the emulsion has been formed. Heat and agitation are well tolerated and alcohol can be added up to 20%. pH should be kept between 5-7,5 and no electrolytes should be added.
Typical use level: 5-10%

Hydrasoft® Sea should be dispersed to the water phase before adding any other water phase ingredients, except if formulating with polymers or gums. In case any polymers or gums are used, which require to be dispersed in the water, these ingredients may be dispersed before the Hydrasoft® Sea. When mixing the Hydrasoft® Sea to the water, make sure a homogenous mixture is achieved before adding the rest of the ingredients.

Hydrasoft® Sea tolerates heat and agitation well and it has a high tolerance for electrolytes apart from some cationic ingredients. Alcohol can be added up to 20 % and pH should be kept at 5-7,5.
Typical use level: 10-50% in gels and emulsions, 5-20% in hair care applications

Packaging: 25kg and 50kg open-head drums