always inspiring more...

Hydrolite® 5

green

Pentylene Glycol

LESS IS MORE

DERIVED FROM SUGAR CANE

MULTIFUNCTIONAL

MOISTURIZER, ENHANCER OF FORMULATION ESTHETICS & PRODUCT PROTECTION
As a pioneer to introduce straight chain 1,2-alkanediols in the personal care market, Symrise launched Hydrolite® 5 in 1992, bringing its incredibly versatile properties to the formulas. Invested to fulfill consumers’ expectations of simplicity combining science and nature, Symrise creates the next generation of pentylene glycol, Hydrolite® 5 green*. It is made by a patented process from bagasse, a by-product coming from sugar cane, ethically and responsibly sourced.

COSMOS approved, Hydrolite® 5 green* opens new opportunities to formulators: ideal for green formulas, it also improves the naturalness of classical formulas.

* CMI Data Source: Symrise Cosmetic Ingredients consumer data base Symrise Ingredient Perception Exploration Qualitative Study 2017

* Same chemical profile & behaviour in formulations than Hydrolite® 5
THE
100% BIO-BASED CARBON
PENTYLENE GLYCOL
Hydrolite® 5 *green* simply fulfills all needs

<table>
<thead>
<tr>
<th>Benefits</th>
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<tbody>
<tr>
<td><strong>Boosts efficacy of actives</strong></td>
<td></td>
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<tr>
<td><strong>Moisturizes</strong></td>
<td>Enhances product protection</td>
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<tr>
<td><strong>Improves formulation esthetics &amp; sensorial profile</strong></td>
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<table>
<thead>
<tr>
<th>Assets</th>
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<tbody>
<tr>
<td><strong>100% Bio-based carbon</strong></td>
<td>(Nature derived ingredient from bagasse of sugar cane)</td>
</tr>
<tr>
<td><strong>88% Biodegradability in 28 days</strong></td>
<td>&gt;0.9 Natural Index (ISO 16128-2)</td>
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<tr>
<td>ECOCERT approved &amp; Halal on going</td>
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<td>Globally compliant</td>
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</table>
Hydrolite® 5 green

FORMULATORS & CONSUMERS: TRY IT AND ADOPT IT!

LIGHT SKIN FEEL

Hydrolite® 5 green brings great skin feel: light but nurturing and velvet skin feel.

By reducing the surface tension, it improves formula esthetics and acts as co-emulsifier and solubilizer.

**PROTOCOL**

SENSORIAL EVALUATION OF FORMULA JC17020 WITH 2% Hydrolite® 5 green VS PLACEBO BY 15 TRAINED VOLUNTEERS

* p<0.05

IMPROVED PIGMENTS DISPERSION

Hydrolite® 5 green improves the intensity and the homogeneity* of the color in foundation with a matt effect*.

**PROTOCOL**

MEASUREMENT OF THE HOMOGENEITY OF THE COLOR BY 13 TRAINED VOLUNTEERS AND OF THE COLOR BY A SPECTROPHOTOMETER. FORMULA JC17020 B WITH 2% Hydrolite® 5 green VS PLACEBO.

* p<0.05
**Hydrolite® 5 green**

**MOISTURIZER & EFFICACY BOOSTER**

**MOISTURIZER**

Hydrolite® 5 *green* boosts skin hydration and primes the skin for active ingredients!

**Hydration**

+10% **

with 3% Hydrolite® 5 *green* vs placebo after 4 hours

** ** p<0.01

**PROTOCOL**

MEASUREMENT OF SKIN HYDRATION BY CORNEOMETER AT T=0, 1H, 2H, 3H, 4H ON THE FOREARM OF 13 VOLUNTEERS.

APPLICATION OF 3 FORMULAS: PLACEBO, FORMULA WITH 2% AND 3% Hydrolite® 5 *green* (JC17020)

**PRODUCT PROTECTION ENHANCER**

In combination with other multifunctionals or preservatives, Hydrolite® 5 *green* boosts their product protection properties. Suitable for use in most types of formulations.

**CFU/g**

<table>
<thead>
<tr>
<th>E. coli</th>
<th>P. aeruginosa</th>
<th>S. aureus</th>
<th>C. albicans</th>
<th>A. brasiliensis</th>
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**5% Hydrolite® 5 green + 0.5% SymSave® H in Aqueous Gel**
ACTIVES PERFORMANCES BOOSTER

• Self-Tanning

**Hydrolite® 5 improves self tanning:** Dihydroxyacetone (DHA) performance is boosted. It also enhances user’s experience: long-lasting, homogeneous, better skin hydration...

95% of panelists find that the color is more homogeneous with 3% Hydrolite® 5 vs placebo (59%)

• Anti Oxidative Stress

**Hydrolite® 5** boosts the activity of Carnosine, a hydrophilic antioxidant, by increasing its bioavailability. By enabling the reduction of the active’s dosage, **Hydrolite® 5** helps to save costs.

-51% **ROS** with 2% Hydrolite® 5 + 0.5% Carnosine + UVA vs untreated skin + UVA

**p<0.01**
Hydrolite® 5 green
INCI: Pentylene Glycol

Product number
996442 Hydrolite® 5 green

Formulation details
Colorless liquid, nearly odorless
Recommended dose: up to 5.0%
Soluble in both water and cosmetic esters
Stable and effective over a wide pH (3-12) and temperature range
Compatible with broadly used cosmetic ingredients
Compliant with Japanese Standards of Quasi-Drug Ingredients as excipient

Main applications
Suitable for topical and oral care formulations

Other versions available
616751 Hydrolite® 5
250371 Hydrolite® 5P (suitable for pharmaceutical formulas)

Visit SymSelect® to request samples and discover new ingredients. Scan code or visit www.symselect.com

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