MIGLYOL® 829
MIGLYOL® 829 ECO

THE ART OF COSMETIC FORMULATIONS

IOI OLEOCHEMICAL

IOI Oleo GmbH
PERSONAL CARE
MIGLYOL® 829 and 829 ECO

The ideal emollient for two-phase products

MIGLYOL® 829 and 829 ECO are glycerin esters of the fractionated C8 and C10 plant fatty acids, combined with succinic acid. The viscosity is about 230 mPa·s. With their high density of 1.00–1.02 g/cm³, MIGLYOL® 829 and 829 ECO promote stability in emulsions by counteracting the tendency of phase separation caused by different specific density of water and oil phase.

Additionally, they can be used to prepare stable two-phase formulations with free-floating oil droplets because of their density being the same as that of water (see “Hydra Splash” formulation below).

MIGLYOL® 829 and 829 ECO
- Are a clear, liquid oil of neutral odor and taste
- Have a high stability against oxidation and stay liquid at 0 °C

Characteristics

INCI: Caprylic/Capric/Succinic Triglyceride

MIGLYOL® 829 and 829 ECO:
- Several units of MCT linked by succinic acid
- Longer playtime on the skin
- Very stable against heat and oxidation
- Alternative to higher-molecular silicone oils and liquid mineral oils
- Specific density is the same as that of water

Properties

- Elegant, transparent formulations
- Two-phase formulations
- No need for emulsifier
- Very economic formulations
- The consumer can “see” the concept
- Cost-effective skin care products
- Cold production with basic equipment

Chemical structure

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Formulation example with 2.5/5/7.5% MIGLYOL® 829 in water
(the oil is colored with a blue dye)
The art of cosmetic formulations

Marketing of cosmetics is an art of its own. The consumer is attracted by different features that drive him to a specific product. The key drivers for the choice of the consumers can be manifold: the brand may be one of the significant aspects. Consumers trust in brands or believe in their image, or they just want to have a feel of luxury connected to a certain brand. Scientific studies, marketing claims, or certain active ingredients convey the scientific essence of cosmetic products, the effect on the skin. This is another important driver for the success of a product, as the consumer wants to see an effect on the skin (e.g. reduction of wrinkles, acne, smell, etc.). In recent years, green chemistry and sustainability became a hot topic for the positioning of personal care products, too. Be it natural certification (like ECOCERT), RSPO certification for sustainable palm oil products, or simply “free-from” claims – they all are targeted at the growing awareness of consumers for environmental topics. Finally, we should not forget the pricing. The product should give a feeling of luxury – but stay affordable.

Last but not least, there is another factor that should not be underestimated when it comes to a consumer’s choice between various products – the appearance. It defines our first impression and is always the first thing we perceive. The appearance can reveal a lot about the product itself. Beauty lies in the eye of the beholder. But what if you could influence the first impression your product makes on the consumer already on the shelf?

You never get a second chance to make a first impression!

MIGLYOL® 829 and 829 ECO are opening new horizons for cosmetic formulations. They can be transformed from an oceanic, relaxing light-blue into a powerful and passionate red formulation. Both the oil phase and the water phase can be colored. Watch the oil droplets hover elegantly in the water phase. Notice how beautifully the miniature oil drops are reflecting when holding the formulation towards the sun. The formulations are stable, can be applied with a pump dispenser and give a refreshing skin feel.

Art as well as cosmetics are known to be the fields where emotions can be expressed and triggered. MIGLYOL® 829 and 829 ECO present the opportunity to combine both and let the formulator be the artist and create unique formulations, customized to the consumers’ wishes or brand positioning. This indeed is transforming every product into a small piece of art.
FORMULATION

Natural Line Hydra Splash – 2-Phase Skin Refreshing Tonic No. 724

<table>
<thead>
<tr>
<th>Phase</th>
<th>Tradename</th>
<th>INCI</th>
<th>%</th>
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<tbody>
<tr>
<td>A</td>
<td>Freda® Hyaluronic Acid</td>
<td>Sodium Hyaluronate</td>
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<tr>
<td>B</td>
<td>Aqua dem.</td>
<td>Aqua</td>
<td>ad 100.0</td>
</tr>
<tr>
<td>C</td>
<td>Keltrol® CG-T</td>
<td>Xanthan Gum</td>
<td>0.5</td>
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<tr>
<td>D</td>
<td>Euxyl® K 700</td>
<td>Phenoxyethanol/Benzyl Alcohol/Potassium Sorbate/Aqua/Tocopherol</td>
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<tr>
<td>E</td>
<td>Color</td>
<td>--</td>
<td>q.s.</td>
</tr>
<tr>
<td>F</td>
<td>MIGLYOL® 829 ECO</td>
<td>Caprylic/Capric/Succinic Triglyceride</td>
<td>5.0</td>
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<tr>
<td>F</td>
<td>Tocopherol</td>
<td>Tocopherol</td>
<td>0.5</td>
</tr>
<tr>
<td>F</td>
<td>Parfum</td>
<td>Parfum (EU) /Fragrance (US)</td>
<td>q.s.</td>
</tr>
</tbody>
</table>

**Formulation guide**

Procedure:
1. Prepare this formulation at room temperature.
2. Dissolve phase A in phase B.
3. Add phase C + D and homogenize.
4. Add phase E to phase F and mix.
5. Add phase F to the formulation by moderate stirring.

**Supplier references**

IOI Oleo GmbH: MIGLYOL®
Schülke & Mayr GmbH: Euxyl®
CP Kelco: Keltrol®

**Specification**

Viscosity at 20 °C, pure gel without oil phase:
min. 4000 mPa·s [500–600 mPA·s]
Shear rate: 1 s⁻¹ [10 s⁻¹] with Malvern Kinexus, 40 mm cone/plate
Stability: three months 20 °C and 40 °C passed; two weeks 50 °C passed
pH: 5.5–7.5
Appearance: transparent

**Typical use of MIGLYOL® 829 and 829 ECO**

Skin Care  Hair Care  Face Care  Bath and Massage Oils

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