



IOI OLEOCHEMICAL

PERSONAL CARE

# TECHNICAL DATA SHEET

## IMWITOR® PG3 C10

INCI: Polyglyceryl-3 Caprate



- MILD CO-SURFACTANT
- FOAM BOOSTING
- VISCOSITY CONTROLLING

## DESCRIPTION

**IMWITOR® PG3 C10** is a liquid nonionic co-surfactant and refatting agent with an estimated HLB of 10 - 13 for all kind of hair and skin cleansing formulations. It is 100% natural, vegan, halal available in RSPO MB quality and produced exclusively in Germany.

The PEG-free refatting agent helps to prevent the skin from drying and provides a luxurious and soft skin feel. Its mild antimicrobial and deodorizing effect can be beneficially in many different rinse-off products.

It is a polyglycerol-3 ester with capric acid. IMWITOR® PG3 C10 is a yellowish viscous liquid having a typical odor. The product may get turbid or inhomogeneous during storage. This does not indicate a loss in quality. Stir before use.

## APPLICATION

**IMWITOR® PG3 C10** is suitable for all kind of rinse-off formulations. The use in self-emulsifying oils is particularly recommended and leads to a beautiful blooming effect (see picture).

**IMWITOR® PG3 C10** helps to increase the viscosity in typical shower gel or shampoo formulations and can be used to decrease the necessary amount of ethoxylated thickener.



Picture 1: Blooming effect of a self-emulsifying oil with IMWITOR® PG3 C10

- |   |  |   |  |
|---|--|---|--|
| <input checked="" type="checkbox"/> Skin Care | <input type="checkbox"/> Body Care             | <input type="checkbox"/> Sun Care             | <input type="checkbox"/> Color Cosmetics             |
| <input checked="" type="checkbox"/> Baby Care | <input checked="" type="checkbox"/> Hair Care  | <input checked="" type="checkbox"/> Bath Care | <input checked="" type="checkbox"/> Wet Wipes        |
| <input type="checkbox"/> Self-Tanning         | <input checked="" type="checkbox"/> Beard Care | <input type="checkbox"/> Deodorants           | <input checked="" type="checkbox"/> Intimate Hygiene |

**IMWITOR® PG3 C10** is dispersible in water and leads to clear solutions with surfactants e.g. sodium laureth sulfate, cocamidopropyl betaine or sulfosuccinate.

## FORMULATION HINTS

- Recommended concentration of **IMWITOR® PG3 C10**: 1 – 3%
- Applicable for cold and hot processes
- Add IMWITOR® PG3 C10 to the surfactant/water or oil phase and stir, until a clear solution is obtained
- Can be combined with all anionic and non-ionic surfactants
- Recommended pH level: pH 4.0 – 6.5
- The product may get turbid or inhomogeneous during storage. This does not indicate a loss in quality. **Stir before use.**

# FORMULATION GUIDE

## JELLYLICIOUS SHOWER NO. 835

Enjoy this arty piece of fun in jelly form during your daily shower. Thanks to the combination of IMWITOR® PG3 C10 that refats and softens the skin and SOFTISAN® conditionHAIR, which moisturizes your skin during and after showering, you will have squeaky clean but super soft and moisturized skin. Just take the Jellylicious Shower, moisturize it and the fun begins!

Just as a tip from formulator to formulator: if you want the Jellylicious Shower fun never to end, set the pH below pH 5.5. As a result, SOFTISAN® conditionHAIR is positively charged and cocoons your skin, even during the rinsing.

|                | Trade Name                       | INCI  | %          |
|----------------|----------------------------------|---|------------|
| <b>PHASE A</b> | Water demin.                     | Aqua  | 34.7       |
|                | Plantacare® 2000 UP              | Decyl Glucoside (and) Aqua  | 10.0       |
|                | Eisenkraut & Zitrone 30213988    | Parfum (EU)/ Fragrance (US)   | 0.7        |
|                | Betadet® HR 50K                  | Aqua (and) Cocamidopropyl Betaine   | 5.0        |
|                | <b>IMWITOR® PG3 C10</b>          | <b>Polyglyceryl-3 Caprate</b>   | <b>5.0</b> |
|                | <b>SOFTISAN® conditionHAIR</b>   | <b>PCA Glyceryl Oleate</b>  | <b>1.0</b> |
|                | Euxyl® PE 9010                   | Phenoxyethanol (and) Ethylhexylglycerin   | 1.0        |
| <b>PHASE B</b> | Glycerin                         | Glycerin  | 40.0       |
|                | Safic' Care T CI                 | Chondrus Crispus  | 2.0        |
|                | C91-6113 Intenza® Yellow Taffeta | Synthetic Fluorphlogopite (and) CI 19140  | 0.1        |
|                | C91-6153 Intenza® Blue Chambray  | Synthetic Fluorphlogopite (and) CI 42090  | 0.1        |
|                | Diamond Sunny Gold GCX-8321      | Aluminum Calcium Sodium Silicate (and) Titanium Dioxide (and) Iron Oxides (and) Tin Oxide | 0.2        |

### PREPARATION:

1. Heat the water to 80°C. Mix and heat phase A in given order up to 80°C. Adjust pH to pH 4.5 - 5.5 if necessary.
2. Premix phase B until the mixture is lump free.
3. Add phase B to phase A and keep stirring for 10 minutes at 80°C.
4. Pour the mixture into molds and allow to cool down.

### SUPPLIERS:

**IOI Oleo: IMWITOR®, SOFTISAN®**  
 BASF: Plantacare®  
 drom: Parfum  
 Kao: Betadet®  
 Schülke & Mayr: Euxyl®  
 Safic Alcan: Safic' Care  
 SunChemical: Intenza®  
 Sandream Impact: Diamond Sunny Gold



**SHOWER EXPLOSION NO. 842**

Shower Explosion may sound dangerous - but believe us, it is just the opposite. It is a care explosion with the fun of using a bath bomb under the shower.

How does it work? SOFTISAN® 378, a semi-solid emollient, connects all powdery ingredients and leaves a light and caring skin feel, SOFTISAN® conditionHAIR provides moisture, SOFTISAN® GC8 protects the product from germs and IMWITOR® PG3 C10 ensures extra creamy foam – all-natural, all eco-friendly.

What's in for you besides sparkly fun and clean and cared skin? The Shower Explosion bombs are super handy, water-free, travel friendly and use less water during application than a conventional bath bomb.

|                | <b>Trade Name</b>              | <b>INCI</b>   | <b>%</b>   |
|----------------|--------------------------------|---|------------|
| <b>PHASE A</b> | Sodium Bicarbonate             | Sodium Bicarbonate                                    | 48.0       |
|                | Citric Acid                    | Citric Acid   | 19.0       |
|                | Maisita 9040                   | Zea Mays (Corn) Starch                                | 8.5        |
|                | Emal® 10 G-3                   | Sodium Lauryl Sulfate                                 | 12.5       |
| <b>PHASE B</b> | <b>SOFTISAN® 378</b>           | <b>Caprylic/Capric/Myristic/ Stearic Triglyceride</b> | <b>8.0</b> |
|                | <b>SOFTISAN® conditionHAIR</b> | <b>PCA Glyceryl Oleate</b>                            | <b>1.0</b> |
|                | <b>SOFTISAN® GC8</b>           | <b>Glyceryl Caprylate</b>                             | <b>1.0</b> |
|                | <b>IMWITOR® PG3 C10</b>        | <b>Polyglyceryl-3 Caprate</b>                         | <b>1.0</b> |
| <b>PHASE C</b> | Nivesse DF Extra 0797442       | Parfum (EU)/ Fragrance (US)                           | 1.0        |

**PREPARATION:**

1. Grind citric acid for 5x5 sec.
2. Mix the citric acid powder with the rest of phase A.
3. Melt the pasty components of phase B (35 - 40°C), then add phase C.
4. Mix phase A and phase B/C until the mixture looks and feels like wet sand.
5. Press into desired shape, than place the Shower Explosion in the freezer (10 min). Remove from mold.

**SUPPLIERS:**

**IOI Oleo: IMWITOR®, SOFTISAN®**  
 AGRANA: Maisita  
 Kao: Emal®  
 Bell: Parfum



## HANDLING AND SHELF LIFE

The shelf life for IMWITOR® PG3 C10 is at least twenty-four months if the product is stored below 25°C in a dry place in original, tightly closed containers, protected from light and moisture.

## PACKAGING UNITS

Hobbock with 25 kg, 600 kg on CP3 pallet  
IBC with 1000 kg

### IOI Oleo GmbH

Hamburg, Germany | +49 40 28 00 31-0  
personalcare@ioioleo.de | www.ioioleo.de

Raw material approved by ECOCERT GREENLIFE, compliant with the COSMOS standard

In particular, IOI Oleo GmbH makes no representations or warranties, neither express nor implied, of merchantability, fitness for a particular purpose that the products to which the information refers may be used without infringing the intellectual property rights of others, or of any other nature hereunder with respect to the information or the products to which the information refers. In no case shall the information be considered a part of our Terms and Conditions of Sale.

