



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

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|---|--|---|--|
| <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	%
PHASE A	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
	IMWITOR® PG3 C10	Polyglyceryl-3 Caprate	5.0
	SOFTISAN® conditionHAIR	PCA Glyceryl Oleate	1.0
	Euxyl® PE 9010	Phenoxyethanol (and) Ethylhexylglycerin	1.0
PHASE B	Glycerin	Glycerin	40.0
	Safic' Care T CI	Chondrus Crispus	2.0
	C91-6113 Intenza® Yellow Taffeta	Synthetic Fluorophlogopite (and) CI 19140	0.1
	C91-6153 Intenza® Blue Chambray	Synthetic Fluorophlogopite (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.

	Trade Name	INCI	%
PHASE A	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
PHASE B	SOFTISAN® 378	Caprylic/Capric/Myristic/ Stearic Triglyceride	8.0
	SOFTISAN® conditionHAIR	PCA Glyceryl Oleate	1.0
	SOFTISAN® GC8	Glyceryl Caprylate	1.0
	IMWITOR® PG3 C10	Polyglyceryl-3 Caprate	1.0
PHASE C	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

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

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