



IOI OLEOCHEMICAL

PERSONAL CARE

TECHNICAL DATA SHEET

SOFTISAN[®] GC8 PalmFree

INCI: Glyceryl Caprylate



THE NATURAL MULTICHALLENGE-SOLVING INGREDIENT

The card up your lab coat sleeve for easy anti-microbial boosting,
enhanced stability, and pigment wetting!



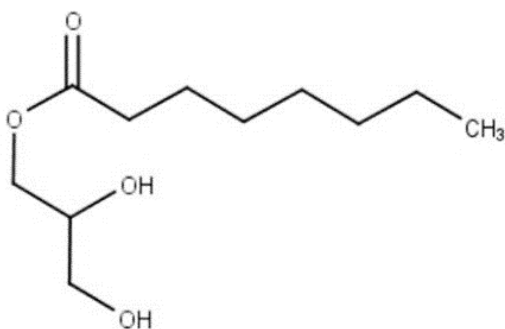
DESCRIPTION

SOFTISAN® GC8 PalmFree is the natural **multichallenge-solving ingredient** that eases **anti-microbial boosting**, enhances **stability**, and improves pigment **wetting**.

The **highly purified** multifunctional ingredient is an ester of glycerol and caprylic acid. SOFTISAN® GC8 PalmFree does not have a sharp melting and crystallization point and can therefore be a white, pasty crystalline mass (<25°C) or clear liquid (>30°C), depending on the storage conditions. The physical form has no influence on the product quality nor performance.

SOFTISAN® GC8 PalmFree is the card up your lab coat sleeve! It's multichallenge solving properties are combined with **100% naturality** (NOI 1.0 according to ISO 16128). It is based on **renewable** and **vegan sources** (coconut & rapeseed) and produced exclusively in Germany. This **eco-friendly** (readily biodegradable & non-toxic to aquatic organisms) multifunctional is the sustainable way to enhance your formulas!

APPLICATION



The **high content of monoglycerides** (min. 88%) with free hydroxyl groups is well suited to bind water molecules. Its amphiphilic characteristic **lowers the surface tension**, helping to **decrease the droplet size** in O/W emulsions, hence, to create **more stable emulsions**.

SOFTISAN® GC8 PalmFree shows **strong anti-microbial activity** with specific effect on fungi. It is compatible with both conventional and alternative preservatives and **boosts** their

performance in **challenge tests**. Its antimicrobial efficacy against microorganisms makes it a valuable INCI for anti-acne products, too.

In color cosmetic and powdery formulations, it acts as a **binder** and **wetting agent** by coating each powder particle. This leads to a more homogeneous appearance.

Glyceryl Caprylate is suitable for **all kinds of technologies** including O/W & W/O emulsions, anhydrous concepts (e.g., solids or color care) or surfactant-based formulas.

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|--|--|--|--|
| <input checked="" type="checkbox"/> Skin Care | <input checked="" type="checkbox"/> Body Care | <input checked="" type="checkbox"/> Sun Care | <input checked="" 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 checked="" type="checkbox"/> Self-Tanning | <input checked="" type="checkbox"/> Beard Care | <input checked="" type="checkbox"/> Deodorants | <input checked="" type="checkbox"/> Intimate Hygiene |

SOFTISAN® GC8 PalmFree is soluble in all oils, fats, and mineral oil and dispersible in excess of water.



FORMULATION HINTS

- Recommended concentration of SOFTISAN® GC8 PalmFree: 0.1 – 2%
 - Enhanced stability of O/W emulsions: 0.1 – 0.5 %
 - Lowers the droplet size
 - Leads to a narrow particle size distribution
 - Antimicrobial boosting:
 - 0.3 – 0.5% in O/W emulsions
 - 0.2 – 0.5% in W/O emulsions
 - Up to 2% in oily or anhydrous concepts
 - Up to 2% in clear surfactant or hydro alcoholic formulas
 - Wetting agent and binder:
 - 0.2 – 0.4% in O/W emulsions (e.g., suncare)
 - 0.3 – 0.5% in color care formulations
- Applicable for hot, cold and mixed processes
 - SOFTISAN® GC8 PalmFree can be a white solid or a clear liquid
 - Ensure that SOFTISAN® GC8 PalmFree is completely liquid (>30°C) when working in cold process
 - Do not heat SOFTISAN® GC8 PalmFree for a longer time at 80°C
- Add SOFTISAN® GC8 PalmFree to the or oil phase (before or after the emulsification process); can also be added in the water or surfactant phase
- Recommended pH level: pH 4.0 – 7.0
- Antimicrobial performance:

Gram+	Gram-	Yeast	Mould
very good	very good	very good	moderate

- Compatible with listed and non-listed preservative systems



FORMULATION GUIDE

ULTRA RICH BARRIER CREAM NO. 805

Skin is our largest organ and protects us from much more than we know. Without it, we would be defenseless! It's finally time to give something back to our skin. For example, with IOI's Ultra Rich Barrier Cream, which, thanks to SOFTISAN® 649, effectively supports the skin barrier by lowering the TEWL and thus promotes skin health. In balanced combination with MIGLYOL® T-C7 and MIGLYOL® OE it creates an incredibly rich cream with a pleasant after feel that gently envelops and pampers your skin. When is your next skin pampering day?

	Trade Name	INCI	%
PHASE A	IMWITOR® 600	Polyglyceryl-3 Polyricinoleate	3.5
	MIGLYOL® OE	Oleyl Erucate	3.0
	MIGLYOL® T-C7	Triheptanoin	8.0
	WITARIX® MCT 60/40	Caprylic/Capric Triglyceride	8.0
	SOFTISAN® 649	Bis-Diglyceryl Polyacyladipate-2	1.0
	Argan Oil	Argania Spinosa Kernel Oil	2.0
	Beeswax	Cera Alba	2.0
	Shea Butter	Butyrospermum Parkii Butter	2.0
PHASE B	Aqua dem.	Aqua	68.2
	SOFTISAN® GC8 PalmFree	Glyceryl Caprylate	0.4
	Zinc Sulfate Heptahydrate	Zinc Sulfate	1.2
PHASE C	Tocopherol	Tocopherol	0.5
	Nivesse DF extra	Parfum (EU)/Fragrance (US)	0.2

PREPARAION:

1. Heat phase A and B to 75°C.
2. Add phase B to phase A in small amounts with stirring, then homogenize at low/medium speed.
3. Cool phase A/B with gentle stirring to approx. 30°C.
4. Add phase C and homogenize for a short time.

SUPPLIERS:

IOI Oleo GmbH: IMWITOR®, MIGLYOL®, SOFTISAN®, WITARIX®
Bell: Parfum



HANDLING AND SHELF LIFE

The shelf life for SOFTISAN® GC8 PalmFree 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.

SOFTISAN® GC8 PalmFree does not have a sharp melting and crystallization point and can therefore be a white solid or a clear liquid. The physical form has no influence on the product quality nor performance.

PACKAGING UNITS

Hobbock with 25 kg, 600 kg on CP3 pallet
Drum with 190 kg, 760 kg on CP3 pallet

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

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