

TECHNICAL DATA SHEET

SOFTISAN® conditionHAIR

INCI: PCA Glyceryl Oleate

















UNIVERSAL NATURAL CATIONIC HAIR & SKIN CONDITIONER

Natural multifunctional ingredient, multi-plant based, for multiple pampering benefits on hair and skin



SOFTISAN® CONDITIONHAIR TECHNICAL DATA SHEET

DESCRIPTION

SOFTISAN® conditionHAIR is a natural based, vegan pure multifunctional ester in viscous liquid form, multi-plant based and produced exclusively in Germany.

Based on **PCA** and **Glyceryl Oleate** this molecule has **synergistic effects** in hair and skin care. At physiological pH (5.5) or lower, the molecule provides a **positive charge** and can bind to the negatively charged hair or skin. It acts as deposition aid for oils (via coacervation) in shampoos.

Due to the presence of **pyrrolidone carboxylic acid** (PCA), also part of the **natural moisturizing factor** (NMF), SOFTISAN® conditionHAIR moisturizes and softens skin & scalp.

It is made of glyceryl monooleate esterified with PCA derived natural glutamic acid and has a **NOI** of **1.0** according to ISO 16128. SOFTISAN® conditionHAIR is a yellow viscous liquid with neutral odor. It is readily biodegradable and non-toxic to algae.

APPLICATION

In hair care cleansing formulas, the squeaky feel left by the removal of dirt, sebum and pollutants often reveals damaged open cuticles. SOFTISAN® conditionHAIR **eases rinseability**, and simultaneously allows the **deposition of light oils or silicones** onto and along the whole hair – for an **easy combing** and styling, yet **weightless feel**.

SOFTISAN® conditionHAIR provides skin care formulas with a **moisturizing feel**, extended by a light conditioning film. This completes its characteristic caring and pampering sensory profile.

Skin Care	Body Care	☐ Sun Care	
□ Baby Care		Bath Care	
□ Self-Tanning	Beard Care	□ Deodorants	$\ \square \ Intimate \ Hygiene$

SOFTISAN® conditionHAIR is miscible with all fats and oils but can lead to reversible turbidity (see chapter "formulation hints".

FORMULATION HINTS

- Recommended concentration of **SOFTISAN®** conditionHAIR: 0.5 2%
 - Skin care: 0.5 2% for excellent skin hydration & softness
 - Hair care: 0.5 2% for enhanced wet and dry combing
 - o Boost the conditioning performance: Combine with 0.5% oil
 - o Anhydrous & color care: 1 2%
 - Clear formulas: Add a mild emulsifier solubilizer (e.g., 0.5% IMWITOR® 375)
- · Applicable for hot and cold processes
- Add SOFTISAN® conditionHAIR to the oil or surfactant phase
- Recommended pH level: pH 4.0 7.0
 - For best efficacy in rinse-off products: pH < 5.5 (cationic charge)
 - For good affinity to hair and skin due to hydrophobic interaction pH > 5.5



FORMULATION GUIDE

HAPPY HAIR! HAPPY EARTH! SOLID CONDITIONING BAR NO. 803

Waterless cosmetics? The ultimate go-green trend? When consumers buy cosmetics, they also buy the amount of water these products contain. Water is not an active ingredient; it is the carrier that unites all other raw materials. Choosing solid cosmetics as alternative demonstrates ecological consciousness. By reducing water in formulations, we gain a variety of benefits, such as less packaging and reduced product weight and sustainability. Good reasons for an ecologically committed consumer.

The benefits of our solid conditioning bar: Use it anywhere, experience a new product sensoriality, save water, the elixir for people and nature & contribute to environmental protection with a responsible attitude.

Trade Name		INCI	%
PHASE A	MIGLYOL® Coco 810	Coco-Caprylate/Caprate	10.0
	MIGLYOL® Gel T	Caprylic/Capric Triglyceride (and)	7.0
		Stearalkonium Bentonite (and)	
		Propylene Carbonate	
	IMWITOR® PG3 C10	Polyglyceryl-3 Caprate	3.0
	IMWITOR® 600	Polyglyceryl-3 Polyricinoleate	1.0
	SOFTISAN® conditionHAIR	PCA Glyceryl Oleate	2.0
	SOFTISAN® 142	Hydrogenated Coco-Glycerides	23.5
	Shea Butter	Butyrospermum Parkii Butter	14.0
	Plantacare® 1200 UP	Lauryl Glucoside	9.0
	Nafol® 1618 HP	Cetearyl Alkohol	5.0
	Carnauba Wax	Copernicia Cerifera Wax	6.0
	Kahlwax 6279L Myrica Fruit Wax	Myrica Cerifera Fruit Wax	6.0
	Argan Oil	Argania Spinosa Kernel Oil	3.0
PHASE B	Water demin.	Aqua	5.0
	Sodium Hydroxide 10%	Sodium Hydroxide	1.0
PHASE C	Tocopherol	Tocopherol	0.5
	Fragrance	Parfum (EU)/Fragrance (US)	2.0
	Color		2.0

PREPARATION:

- 1. Heat phase A to approx. 85°C and homogenize, cool down to 40°C under stirring.
- 2. Add phase B/C and homogenize. Fill the mass into molds and leave untouched for a day, then put it in the freezer for a day.

SUPPLIERS:

IOI Oleo GmbH: IMWITOR®, MIGLYOL®, SOFTISAN®

BASF: Plantacare® Sasol: Nafol®

KahlWax: Myrica Fruit Wax



LIGHT²RICH TRANSFORMER LOTION NO. 812

This ultra-light and easily spreadable emulsion transforms into a rich lotion during application that gives you the care level you need. The technique of turning an O/W lotion into a W/O lotion is supported by the use of the W/O emulsifier IMWITOR® 600. SOFTISAN® conditionHAIR and SOFTIGEN®PURA are responsible for the rich and luxurious skin feel, whereas MIGLYOL® T-C7 and MIGLYOL® 8810 provide the light feeling in the beginning.

	Trade Name	INCI	%
PHASE A	IMWITOR® 600	Polyglyceryl-3 Polyricinoleate	4.0
	SOFTIGEN®PURA	Caprylic/Capric Triglyceride (and)	2.0
		Hydrogenated Rapeseed Oil	
	MIGLYOL® T-C7	Triheptanoin	5.0
	MIGLYOL® 8810	Butylene Glycol Dicaprylate/Dicaprate	5.0
	SOFTISAN® conditionHAIR	PCA Glyceryl Oleate	0.3
	6607L Sunflower Seed Wax	Helianthus Annuus Seed Cera (and)	8.0
		Ascorbyl Palmitate (and) Tocopherol	
	Nafol® 1618H	Cetearyl Alcohol	2.5
PHASE B	Water demin.	Aqua	71.0
	Glycerin	Glycerin	4.0
	Keltrol® CG-SFT	Xanthan Gum	0.6
	Euxyl® PE 9010	Phenoxyethanol (and) Ethylhexylglycerin	1.0
PHASE C	Plantapon® LGC Sorb	Sodium Lauryl Glucose Carboxylate (and) Lauryl Glucoside	1.5
PHASE D	0798185 White Flair	Parfum (EU)/ Fragrance (US	0.3

PREPARATION:

1. Heat phase A and B to approx. 80°C.

- 2. Mix phase B and C and add phase A to phases B/C. Homogenize (3 min @ 5.000 8.000 rpm).
- 3. Cool down with stirring.
- 4. Add phase D at 30°C.

SUPPLIERS:

IOI Oleo GmbH: IMWITOR®, MIGLYOL®, SOFTIGEN®, SOFTISAN®

KahlWax: Sunflower Seed Wax

Sasol: Nafol® CP Kelco: Keltrol® Schülke & Mayr: Euxyl® BASF: Plantapon® Bell: Parfum



SOFTISAN® CONDITIONHAIR TECHNICAL DATA SHEET

HANDLING AND SHELF LIFE

The shelf life for SOFTISAN® conditionHAIR 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

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.

