



# Technical Data Sheet

## IMWITOR<sup>®</sup> PG4 Cocoate

IINCI: Polyglyceryl-4 Cocoate

- ❖ NONIONIC CO-SURFACTANT
- ❖ REFATTING
- ❖ FOAM ENHANCING



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Personal Care



## 1. DESCRIPTION

IMWITOR® PG4 Cocoate is a non-ionic co-surfactant for hair and body care with an estimated HLB of 10-12. It is 100 % natural, vegan, available in RSPO MB quality and produced exclusively in Germany.

It is polyglycerol-4 ester with C12-C18 fatty acid from coconut oil. IMWITOR® PG4 Cocoate is a clear to yellowish viscous liquid with a characteristic odor.

## 2. APPLICATION

IMWITOR® PG4 Cocoate acts as co-surfactant in all kind of shower gels, shampoos, hand washes and facial cleaners. IMWITOR® PG4 Cocoate has refatting and foam enhancing properties.

In combination with other surfactants, it improves skin feeling, mildness, foam characteristics and eases the formulation of hydrophobic ingredients like fragrances or oil components.

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

IMWITOR® PG4 Cocoate 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® PG4 Cocoate: 1 – 5%
- Applicable for cold and hot processes
- Add IMWITOR® PG4 Cocoate to the surfactant/water phase
- Can be combined with all kind of surfactant solutions (anionic, amphoteric, nonionic or cationic) by gentle stirring.
- In order to decrease the viscosity it is recommended to heat IMWITOR® PG4 Cocoate to 40°C.
- Recommended pH level: pH 4.0 – 6.5





### 3. FORMULATION GUIDE

#### CLEANSING HANDFOAM TO GO

No. 774

Cleaning hands everywhere without water or soap and no need for a towel to dry them... is that possible? We make it possible! With our formulation, we offer the basis for a product that takes environmental aspects into account and, at the same time, ensures hygiene and protection for hands. SOFTIGEN® 767 is a popular mild cleansing agent with excellent refatting characteristics and IMWITOR® PG4 Cocoate acts in synergy with other surface active ingredients to improve the cleansing properties. SOFTISAN® conditionHAIR leads to higher refatting properties in the final product, while Ethanol provides a refreshing effect and together with SOFTISAN® GC8 PalmFree provides natural preservation of the product.

Phase A		%
SOFTIGEN® 767 <sup>1</sup>	PEG-6 Caprylic/Capric Glycerides	2.5
IMWITOR® PG4 Cocoate <sup>1</sup>	Polyglyceryl-4 Cocoate	0.5
SOFTISAN® conditionHAIR <sup>1</sup>	PCA Glyceryl Oleate	0.3
SOFTISAN® GC8 PalmFree <sup>1</sup>	Glyceryl Caprylate	0.8
Phase B		
Aqua dem.	Aqua	78.3
Fragrance	Parfum (EU)/ Fragrance (US)	q.s.
Ethanol (96%)	Alcohol denat.	16.0
Hamamelis dest.	Hamamelis Virginiana	1.0
Panthenol	Panthenol	0.5
Disodium EDTA	Disodium EDTA	0.1

#### Procedure:

- Heat up phase A to 40°C.
- Mix phase B at room temperature and add phase B in small portions to phase A. Keep stirring until a clear solution is obtained.

#### Supplier References:

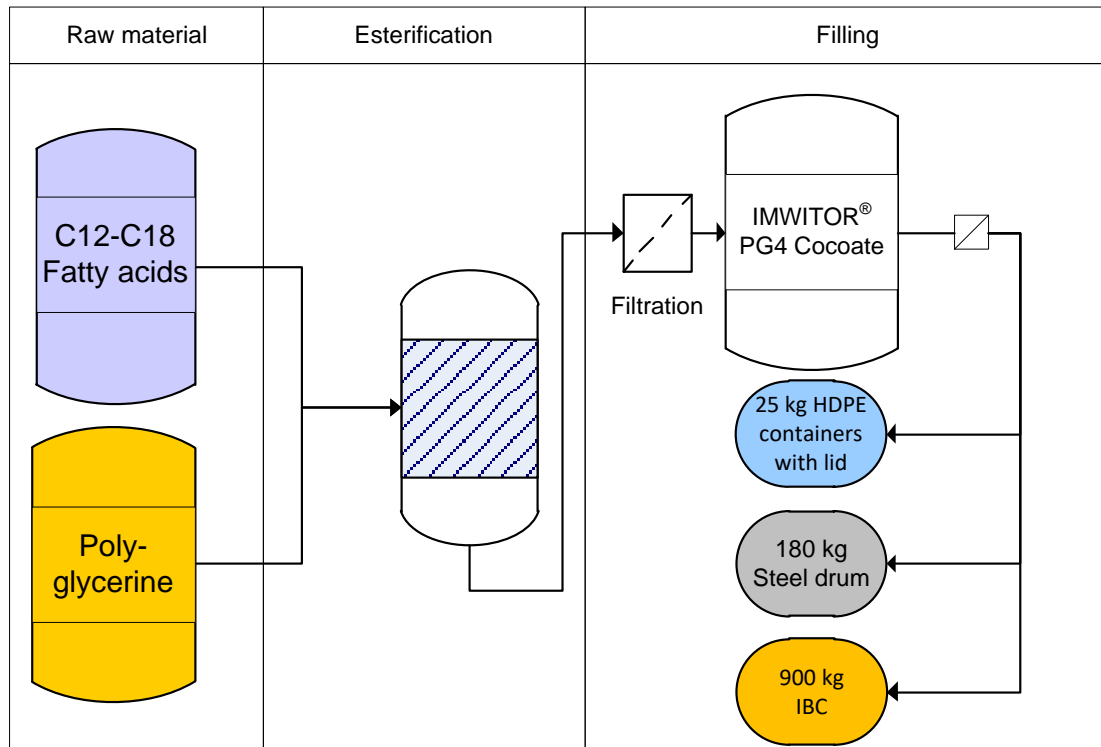
<sup>1</sup>IOI Oleo GmbH



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#### 4. FLOW CHART



#### 5. HANDLING AND SHELF LIFE

Long-term storage: the shelf life for IMWITOR® PG4 Cocoate 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.

#### 6. PACKAGING UNITS

Hobbock with 25 kg, 600 kg on CP3 pallet

Drum with 190 kg, 760 kg on CP3 pallet

IBC with 900 kg





## 7. REGULATORY STATEMENT

	<b>IMWITOR® PG4 Cocoate</b>
<b>HS Code</b>	38249992
<b>CAS No.</b>	67784-82-1
<b>EU EINECS EC No.</b>	270-616-4
<b>REACH Status</b>	exempted Polymer
<b>Country of Origin</b>	Germany
<b>USA</b>	registered for import and use in cosmetics
<b>USA-GHS Compliance</b>	/
<b>Australia AICS CAS No.</b>	9007-48-1
<b>Canada DSL DSL/NDSL</b>	DSL
<b>Canada WHMIS 2015 Compliance</b>	/
<b>China IECIC Standard Chinese Name &amp; Index</b>	/
<b>Japan Ingredient/Labeling name</b>	<b>ヤシ油脂肪酸ポリグリセリル-4</b>
<b>Korean INCI name</b>	폴리글리세릴-4 코코에이트
<b>Halal</b>	Yes
<b>Kosher</b>	No

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