



Technical Data Sheet

IMWITOR[®] 600

INCI: Polyglyceryl-3 Polyricinoleate

- ❖ W/O EMULSIFIER
- ❖ IMPROVES SKIN FEEL
- ❖ 100% NATURAL & PALM-FREE



IOI OLEOCHEMICAL

Personal Care



1. DESCRIPTION

IMWITOR® 600 is a non-ionic emulsifier for W/O-emulsions with an estimated HLB of 4. This food grade emulsifier is free from palm oil/palm kernel oil, 100% natural, vegan and produced exclusively in Germany.

The skin-friendly and very effective W/O emulsifier is very stable against oxidation processes. This property makes him very interesting for the use in sun care formulations.

It is an ester from polyglycerin and plant-derived, condensed castor oil fatty acids. IMWITOR® 600 is a yellow to brownish liquid of viscous consistency, similar to honey, and has a typical odour and a neutral taste.

2. APPLICATION

IMWITOR® 600 is suitable for all kinds of W/O emulsions and colour cosmetics (e.g. as a wetting agent), especially suitable for soft to low-viscosity W/O emulsions with a non-greasy, soft and pleasant skin feel. In contrast to many other W/O emulsifiers, IMWITOR® 600 allows low consistencies without stability problems.

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

IMWITOR® 600 is soluble in fatty and polar oils such as MCTs (e.g. WITARIX® MCT 60/40) and becomes slightly cloudy in mineral oil and cold ethanol. It is insoluble in water.

FORMULATION HINTS

- Recommended concentration of IMWITOR® 600: 2 – 4%.
- Applicable for cold/cold, hot/cold and hot/hot processes.
- IMWITOR® 600 creates a light and pleasant skin feel W/O formulations ranging from liquid to firm, depending on the combination of co-emulsifiers and oil phase.
- Very flexible and stable W/O emulsions are achieved through the combination with a co-emulsifier like IMWITOR® PG3 DIS (Polyglyceryl-3 Diisostearate) or Sorbitan Monooleate. By adding waxes (e.g. Beeswax) or metal soaps (e.g. Magnesium Stearate, Magnesium Sulfate or Aluminium Tristearate) heat stability can be optimised and viscosity controlled.
- Add IMWITOR® 600 to the oil phase. Heat both oil and water phase to 65 – 80°C. Pour the water phase in small portions into the oil phase under stirring or homogenisation. When the whole water phase is added, homogenise the formulation (5.000-8.000 rpm) but avoid over homogenisation. Cool the emulsion to room temperature under stirring.
- For cold processes MIGLYOL® Gel can be used as a stabiliser for the formulation.
- For oil phases from 20 to 40%.





3. FORMULATION GUIDE

LIGHT MOISTURISING W/O LOTION

No. 734

W/O creams are always heavy creams, which do not spread well on the skin? Well, for some that's definitely true, but not for this light and liquid W/O lotion. Thanks to IMWITOR® 600 in combination with sorbitan monooleate, this lotion spreads easily while still maintaining a very protective and pleasant layer on your skin. The well-balanced use of light, medium and slow spreading vegetable oils and IOI Emollients ensures a smooth feeling right around the clock.

Phase A		%
IMWITOR® 600 ¹	Polyglyceryl-3 Polyricinoleate	3.0
MIGLYOL® 8810 ¹	Butylene Glycol Dicaprylate/Dicaprate	7.0
WITARIX® MCT 60/40 ¹	Caprylic/Capric Triglyceride	15.0
Span® 80 ²	Sorbitan Monooleate	1.0
Argan Oil	Argania Spinosa (Argan) Kernel Oil	1.0
Baobab Oil	Adansonia Digitata (Baobab) Seed Oil	1.0
Barbary Fig Oil	Optunia Ficus-Indica (Barbary Fig) Seed Oil	1.0
Beeswax	Cera Alba	0.5
Tocopherol	Tocopherol	0.5
<hr/>		
Phase B		
Glycerin 99.5	Glycerin	2.0
Zinc Sulfate Heptahydrate	Zinc Sulfate	1.2
SOFTISAN® GC8 PalmFree ¹	Glyceryl Caprylate	0.4
Aqua dem.	Aqua	66.4

Procedure:

- Heat phases A and B separately to approx. 75 – 80°C.
- Add phase B to phase A in small amounts with stirring and homogenise (5.000 – 8.000 rpm).
- Cool phase A/B with gentle stirring to approx. 30°C.

Supplier References:

¹IOI Oleo GmbH, ²Croda



IOI OLEOCHEMICAL



BABY NAPPY CREAM

No. 594

All mothers and fathers are familiar with erythema in babies: in the first few years, infants need special skin care as part of nappy changing. Baby nappy cream soothes irritations in babies' delicate skin and prevents recurring rashes. The protective W/O formula containing SOFTIGEN®PURA as an alternative to petrolatum offers good skin protection, and SOFTISAN® 649 as a deposition aid for zinc oxide, fulfils all requirements for making babies' skin smooth again.

Phase A		%
SOFTIGEN®PURA ¹	Olus Oil	16.0
WITARIX® MCT 60/40 ¹	Caprylic/Capric Triglyceride	10.0
SOFTISAN® 649 ¹	Bis-Diglyceryl Polyacyladipate-2	5.0
IMWITOR® 600 ¹	Polyglyceryl-3 Polyricinoleate	2.5
IMWITOR® PG3 DIS ¹	Polyglyceryl-3 Diisostearate	1.0
Shea Butter	Butyrospermum Parkii (Shea) Butter	4.0
Beeswax	Beeswax	2.0
Tocopherol	Tocopherol	0.5
<hr/>		
Phase B		
Allantoin	Allantoin	0.2
Magnesium Sulfate x 7H ₂ O	Magnesium Sulfate	2.0
Preservative	Preservative	q.s.
Aqua dem.	Aqua	Ad 100.0
<hr/>		
Phase C		
Panthenol	Panthenol	3.0
<hr/>		
Phase D		
Zinc Oxide	Zinc Oxide	15.0
Titanium Dioxide	Titanium Dioxide	5.0

Procedure:

- Heat phases A and B separately to approx. 80°C.
- Add phase C to phase B.
- Add phase B/C to phase A, homogenise (5.000 – 8.000 rpm).
- Cool with gentle stirring to approx. 50°C, then add phase D in small amounts and homogenise again.
- Cool with gentle stirring to approx. 30°C.

Supplier References:

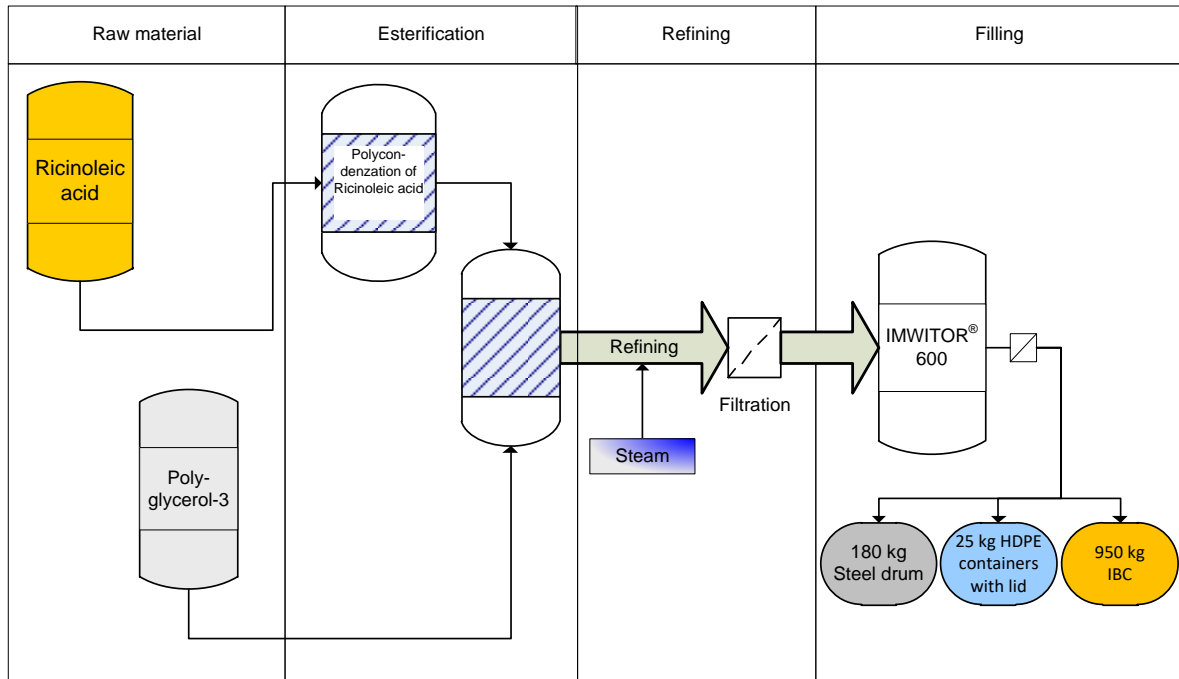
¹IOI Oleo GmbH



IOI OLEOCHEMICAL



4. FLOW CHART



5. HANDLING AND SHELF LIFE

The shelf life for IMWITOR® 600 is at least thirty-six 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 180 kg; 720 kg on CP3 pallet
IBC with 950 kg





7. REGULATORY STATEMENT

	IMWITOR® 600
HS Code	38249992
CAS No.	68936-89-0
EU EINECS EC No.	294-585-1
REACH Status	exempted Polymer
Country of Origin	Germany
USA	registered for import and use in cosmetics
USA-GHS Compliance	Yes
Australia AICS CAS No.	68936-89-0
Canada DSL DSL/NDSL	NDSL & Revised ICL
Canada WHMIS 2015 Compliance	Yes
China IECIC Standard Chinese Name & Index	聚甘油-3 聚蓖麻醇酸酯 03832
Japan Ingredient/ Labelling name	ポリリシノレイン酸ポリグリセリル-3
Korean INCI name	폴리글리세릴-3 폴리리시놀리에이트
Kosher	Yes
Halal	Yes

Please contact your distribution partner in your country or contact us directly at personalcare@ioioleo.de
Hamburg, Germany | +49 40 28 00 31 – 0 | www.ioioleo.de

All information and further technical advice (“Information”) are presented in good faith and believed to be correct and are based on IOI Oleo GmbH’s (including all group companies) present technical knowledge. IOI Oleo GmbH makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. As far as legally possible, IOI Oleo GmbH will not be responsible for damages of any nature whatsoever resulting from the use of or reliance upon such information. IOI Oleo GmbH reserves the right to make any changes according to technological progress or further developments in its sole discretion.

IN PARTICULAR, IOI OLEO GMBH MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR 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 INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS. IN NO CASE SHALL THE INFORMATION BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE.

07.2019/V02



IOI OLEOCHEMICAL