



TOUCHING TECHNOLOGIES



TOUCHING TECHNOLOGIES



About Technologies

Innovators of the first hour with the vision of Arthur Imhausen in 1912, our specialty ingredients IMWITOR®, MIGLYOL®, SOFTIGEN®, SOFTISAN®, DYNASAN® & WITARIX® inspire trust and costeffective reliability.

Today equipped with first class GMP certified production, IOI Oleo GmbH (part of IOI Oleochemical Division) proudly produces in Germany the highest quality of esters and natural ingredients for pharmaceutical, cosmetics & nutrition applications.



Sensorial Technologies

A broad portfolio of multifunctional ingredients from emollients to emulsifiers makes IOI Oleo a creative partner for both modern and nature-based cosmetic formulators.

Let our experience develop and support your tailor sensorial profile and make this touch become your signature.



Emotional Technologies

The sustainability, touch and after-feel of your next formula is of upmost importance to create an impactful consumer experience.

Our passionate team will provide you with a full range of emotion-providing solutions to pick the best story and sensory profile you need for your concept.

All of this, in a constant and transparent respect of Nature.

INCI Register	4
Selection Criteria Guide	•
Signature Touch	8
Emollients	16
Signature Texture	20
Emulsifiers	22
Multifunctionals	26
Oleogels, Stabilizing Agents	32
Solid Lipids, Consistency Agents	34
Solubilizers, Surfactants	36
Distribution Partners	38

ERSONAL CARE

INCI REGISTER

Bis-Dig/yeoryl Polyacyladipator-1 SOFTISAN* 649 2 9 Bis-Dig/yeoryl Polyacyladipator-2 SOFTISAN* 649 2 9 Butylene Glycol Dicaprylate/Dicaprate MIGLYOL* 8810_MIGLYOL* 8810 ECO (NEW) 1 6 Caprylic/Capric Triglyceride IMWITTOR* 742 (arm) 0 31 Caprylic/Capric Triglyceride WITTARIX* MCT 60/40 Cocomut based, wittarix* MCT 60/40 SG, wittarix* MCT 60/40 SG, wittarix* MCT 70/30 Cocomut based, wittarix*	INCI	Trade Name	China compliant	Page
Butylene Glycol Dicaptylate/Dicaptrate	Bis-Diglyceryl Polyacyladipate-1	SOFTISAN® 645	•	29
Caprylic/Capric Glycerides IMWITOR* 742 (NTO) OUTARIX* MCT 60/40, WITARIX* MCT 60/40 Coconut based, WITARIX* MCT 60/40 SG, WITARIX* MCT 60/40 SG, WITARIX* MCT 60/40 SG, WITARIX* MCT 70/30 Caprylic/Capric Triglyceride (and) Hydrogenated Rapeseed OII SOFTIGEN*PURA 19 Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonate Caprylic/Capric/Succinic Triglyceride SOFTISAN* 378 19 Caprylic/Capric/Succinic Triglyceride MIGLYOL* 829, MIGLYOL* 829 ECO 19 Coco-Caprylate/Caprate MIGLYOL* 829, MIGLYOL* 829 ECO 19 Coco-Caprylate/Caprate MIGLYOL* 829, MIGLYOL* 829 ECO 16 Glyceryl Caprylate SOFTISAN* GCB, SOFTISAN* GCB PalmFree 31 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate Glyceryl Isostearate IMWITOR* GMIS 4 Glyceryl Ricinoleate SOFTIGEN* 701 (NTO) , SOFTIGEN* 701 ECO (NTO) 31 Glyceryl Stearate IMWITOR* 491, IMWITOR* 491, IMWITOR* 491, IMWITOR* 948 IMWITOR* 940 K 6 Glyceryl Stearate Citrate IMWITOR* 372 P 23 Glyceryl Stearate Citrate IMWITOR* 372 P 35 Hydrogenated Coco-Glycerides SOFTISAN* 100, SOFTISAN* 142 4 50 50 50 50 50 50 50 50 50	Bis-Diglyceryl Polyacyladipate-2	SOFTISAN® 649	•	29
Caprylic/Capric Triglyceride WiTARIX* MCT 60/40 coconut based, WITARIX* MCT 60/40 SG, WITARIX* MCT 60/40 SG, WITARIX* MCT 60/40 SG, WITARIX* MCT 70/30 Caprylic/Capric Triglyceride (and) Hydrogenated Rapeseed Oil SOFTIGEN*PURA • 19 Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonate Caprylic/Capric/Myristic/Stearic Triglyceride SOFTISAN* 378 • 19 Caprylic/Capric/Myristic/Stearic Triglyceride MIGLYOL* 829, MIGLYOL* 829 ECO • 19 Coco-Caprylate/Caprate MIGLYOL* 829, MIGLYOL* 829 ECO • 19 Coco-Caprylate/Caprate MIGLYOL* 829, MIGLYOL* 829 ECO • 16 Glyceryl Clarite/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 SOFTISAN* GC8, SOFTISAN* GC8 PalmFree • 31 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 IMWITOR* 375 • 23 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 IMWITOR* GMIS Glyceryl Closete Glyceryl Cleate IMWITOR* 948 MTO • 24 Glyceryl Cleate IMWITOR* 949, IMWITOR* 94	Butylene Glycol Dicaprylate/Dicaprate	MIGLYOL® 8810 , MIGLYOL® 8810 ECO (NEW)	•	16
WITARIX* MCT 60/40 SG, WITARIX* MCT 60/40 SG, WITARIX* MCT 70/30 Caprylic/Capric Triglyceride (and) Hydrogenated Rapeaseed Oil SOFTIGEN*PURA 19 Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonatae Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonatae Caprylic/Capric/Succinic Triglyceride SOFTISAN* 378 19 Caprylic/Capric/Succinic Triglyceride MIGLYOL* 829, MIGLYOL* 829 ECO 19 Coco-Caprylate/Caprate MIGLYOL* Oco 810 16 Giyceryl Caprylate SOFTISAN* GC8, SOFTISAN* GC8 PalmFree 31 Glyceryl Caprylate SOFTISAN* GC8, SOFTISAN* GC8 PalmFree 31 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate MWITOR* liteMULS Glyceryl Ricinoleate MWITOR* 948 MITO 424 Glyceryl Ricinoleate MWITOR* 948 MITO 526 Glyceryl Stearate MWITOR* 949 MWITOR* 990 K 64 Glyceryl Stearate Citrate MWITOR* 990 K 64 Glyceryl Stearate SE MWITOR* 960 K 65 SOFTISAN* 100, SOFTISAN* 142 65 SOFTISAN* 154 Bydrogenated Coco-Glycerides SOFTISAN* 100, SOFTISAN* 142 65 SOFTISAN* 154 SOFTISAN* 154 SOFTISAN* 154 SOFTISAN* 154 SOFTISAN* 154 SOFTISAN* 164 SOFT	Caprylic/Capric Glycerides	IMWITOR® 742 MTO	•	31
Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonate Caprylic/Capric/Myristic/Stearic Triglyceride SOFTISAN* 378 • 19 Caprylic/Capric/Myristic/Stearic Triglyceride MIGLYOL* 829, MIGLYOL* 829 ECO • 19 Coco-Caprylate/Caprate MIGLYOL* Coco 810 • 16 Decyl Oleate MIGLYOL* DO (MTD) 6 Olyceryl Caprylate SOFTISAN* GC8, SOFTISAN* GC8 PalmFree • 31 Glyceryl Citrate/Lactate/Linoleate/Oleate IMWITOR* 375 • 23 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Glyceryl Stearate IMWITOR* GMIS Glyceryl Ricinoleate SOFTIGEN* 701 (WTD), SOFTIGEN* 701 ECO (MTD) 31 Glyceryl Stearate IMWITOR* 372 P Glyceryl Stearate Citrate IMWITOR* 372 P Glyceryl Stearate SE IMWITOR* 960 K D 33 Hydrogenated Palm Oil	Caprylic/Capric Triglyceride	WITARIX® MCT 60/40 coconut based, WITARIX® MCT 60/40 SG, NEW MTO	0	19
Canrylic/Capric/Myristic/Stearic Triglyceride SOFTISAN* 378 ● 19 Caprylic/Capric/Myristic/Stearic Triglyceride MIGLYOL* 829, MIGLYOL* 829 ECO ● 19 Coco-Caprylate/Caprate MIGLYOL* Coco 810 ● 16 Decyl Oleate MIGLYOL* DO (MTO) ● 16 Glyceryl Caprylate SOFTISAN* GC8, SOFTISAN* GC8 PalmFree ● 31 Glyceryl Citrate/Lactate/Linoleate/Oleate IMWITOR* 375 ● 23 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 IMWITOR* liteMULS 23 Glyceryl Sostearate IMWITOR* GMIS ● 24 Glyceryl Oleate IMWITOR* 948 (MTO) ● 24 Glyceryl Ricinoleate SOFTIGEN* 701 (MTO), SOFTIGEN* 701 ECO (MTO) ● 31 Glyceryl Stearate IMWITOR* 491, IMWITOR* 990 K ● 23 Glyceryl Stearate Citrate IMWITOR* 372 P ● 23 Glyceryl Stearate SE IMWITOR* 960 K ● 23 Hydrogenated Coco-Glycerides SOFTISAN* 100, SOFTISAN* 142 ● 35 Hydrogenated Palm Oil SOFTISAN* 154 ● 35	Caprylic/Capric Triglyceride (and) Hydrogenated Rapeseed Oil	SOFTIGEN®PURA	•	19
Caprylic/Capric/Succinic Triglyceride MIGLYOL* 829, MIGLYOL* 829 ECO 19 Coco-Caprylate/Caprate MIGLYOL* Coco 810 0 16 Decyl Oleate MIGLYOL* DO (MTO) 0 16 Glyceryl Caprylate SOFTISAN* GC8, SOFTISAN* GC8 PalmFree 11 Glyceryl Citrate/Lactate/Linoleate/Oleate IMWITOR* 375 12 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate IMWITOR* IlteMULS Glyceryl Isostearate IMWITOR* GMIS 4 Glyceryl Ricinoleate SOFTIGEN* 701 (MTO), SOFTIGEN* 701 ECO (MTO) 31 Glyceryl Stearate IMWITOR* 491, IMWITOR* 990 K Glyceryl Stearate Citrate IMWITOR* 990 K Glyceryl Stearate Citrate IMWITOR* 960 K 23 Glyceryl Stearate SE IMWITOR* 960 K 35 Hydrogenated Palm Oil		MIGLYOL® Gel B	•	32
Coco-Caprylate/Caprate MIGLYOL® Coco 810 ● 16 Decyl Oleate MIGLYOL® DO (urro) ● 16 Glyceryl Caprylate SOFTISAN® GC8, SOFTISAN® GC8 PalmFree ● 31 Glyceryl Citrate/Lactate/Linoleate/Oleate IMWITOR® 375 ● 23 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate IMWITOR® IiteMULS 23 Glyceryl I sostearate IMWITOR® GMIS ● 24 Glyceryl Oleate IMWITOR® 948 (MTO) ● 24 Glyceryl Ricinoleate SOFTIGEN® 701 (MTO), SOFTIGEN® 701 ECO (MTO) ● 31 Glyceryl Stearate IMWITOR® 9491, IMWITOR® 9491, IMWITOR® 9490 K ● 23 Glyceryl Stearate Citrate IMWITOR® 372 P ● 23 Glyceryl Stearate SE IMWITOR® 960 K ● 23 Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 ● 35 Hydrogenated Palm Oil SOFTISAN® 154 ● 35	Caprylic/Capric/Myristic/Stearic Triglyceride	SOFTISAN® 378	•	19
Decyl Oleate MIGLYOL® DO MTO © 16 Glyceryl Caprylate SOFTISAN® GC8, SOFTISAN® GC8 PalmFree ● 31 Glyceryl Citrate/Lactate/Linoleate/Oleate IMWITOR® 375 ● 23 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate Glyceryl Isostearate IMWITOR® GMIS ● 24 Glyceryl Oleate IMWITOR® 948 (MTO) ● 24 Glyceryl Ricinoleate SOFTIGEN® 701 (MTO), SOFTIGEN® 701 ECO (MTO) Glyceryl Stearate IMWITOR® 491, IMWITOR® 900 K Glyceryl Stearate Citrate IMWITOR® 372 P ● 23 Glyceryl Stearate SE IMWITOR® 960 K ● 23 Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 ● 35 Hydrogenated Palm Oil	Caprylic/Capric/Succinic Triglyceride	MIGLYOL® 829, MIGLYOL® 829 ECO	•	19
Glyceryl Caprylate SOFTISAN® GC8, SOFTISAN® GC8 PalmFree IMWITOR® 375 Glyceryl Citrate/Lactate/Linoleate/Oleate IMWITOR® 375 Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate IMWITOR® IiteMULS Glyceryl Isostearate IMWITOR® GMIS Glyceryl Oleate IMWITOR® 948 MTO Glyceryl Ricinoleate SOFTIGEN® 701 MTO , SOFTIGEN® 701 ECO MTO Glyceryl Stearate IMWITOR® 491, IMWITOR® 9491, IMWITOR® 900 K Glyceryl Stearate Citrate IMWITOR® 372 P Glyceryl Stearate SE IMWITOR® 960 K D 23 Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 BYDROGEN 35 Hydrogenated Palm Oil	Coco-Caprylate/Caprate	MIGLYOL® Coco 810	•	16
Glyceryl Citrate/Lactate/Linoleate/Oleate Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate Glyceryl Isostearate IMWITOR® GMIS Glyceryl Oleate IMWITOR® 948 MTO Queryl Ricinoleate SOFTIGEN® 701 MTO , SOFTIGEN® 701 ECO MTO Glyceryl Stearate IMWITOR® 491, IMWITOR® 900 K Glyceryl Stearate Citrate IMWITOR® 372 P Queryl Stearate SE IMWITOR® 960 K Queryl Stearate SE Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 SOFTISAN® 154 SOFTISAN® 154 SOFTISAN® 154	Decyl Oleate	MIGLYOL® DO MTO	0	16
Glyceryl Citrate/Lactate/Linoleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate IMWITOR® IiteMULS Glyceryl Isostearate IMWITOR® GMIS Glyceryl Oleate IMWITOR® 948 MTO \$\text{MTO}\$ \$\text{94}\$ Glyceryl Ricinoleate \$\text{SOFTIGEN® 701 MTO}\$, \$\text{SOFTIGEN® 701 ECO MTO}\$ \$\text{0}\$ 31 Glyceryl Stearate IMWITOR® 491, IMWITOR® 491, IMWITOR® 900 K \$\text{0}\$ Glyceryl Stearate Citrate IMWITOR® 372 P \$\text{0}\$ \$\text{23}\$ Glyceryl Stearate SE IMWITOR® 960 K \$\text{0}\$ \$\text{23}\$ Hydrogenated Coco-Glycerides \$\text{SOFTISAN® 100, SOFTISAN® 142}\$ \$\text{0}\$ \$\text{35}\$	Glyceryl Caprylate	SOFTISAN® GC8, SOFTISAN® GC8 PalmFree	•	31
Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate Glyceryl Isostearate IMWITOR® GMIS Glyceryl Oleate IMWITOR® 948 (MTO) Glyceryl Ricinoleate SOFTIGEN® 701 (MTO), SOFTIGEN® 701 ECO (MTO) Glyceryl Stearate IMWITOR® 491, IMWITOR® 990 K Glyceryl Stearate Citrate IMWITOR® 372 P Glyceryl Stearate SE IMWITOR® 960 K D 23 Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 Tocology Softisan® 154 Tocology Softisan® 154 Tocology Softisan® 154	Glyceryl Citrate/Lactate/Linoleate/Oleate	IMWITOR® 375	•	23
Glyceryl Oleate IMWITOR® 948 MTO Glyceryl Ricinoleate SOFTIGEN® 701 MTO , SOFTIGEN® 701 ECO MTO Glyceryl Stearate IMWITOR® 491, MWITOR® 900 K Glyceryl Stearate Citrate IMWITOR® 372 P Glyceryl Stearate SE IMWITOR® 960 K Glyceryl Stearate SE Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 Hydrogenated Palm Oil SOFTISAN® 154		IMWITOR® liteMULS		23
Glyceryl Ricinoleate SOFTIGEN® 701 MTO , SOFTIGEN® 701 ECO MTO Glyceryl Stearate IMWITOR® 491,	Glyceryl Isostearate	IMWITOR® GMIS	•	24
Glyceryl Stearate IMWITOR® 491, IMWITOR® 900 K Glyceryl Stearate Citrate IMWITOR® 372 P Glyceryl Stearate SE IMWITOR® 960 K U 23 Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 Hydrogenated Palm Oil SOFTISAN® 154 • 35	Glyceryl Oleate	IMWITOR® 948 MTO	•	24
IMWITOR® 900 K ● Glyceryl Stearate Citrate IMWITOR® 372 P ● 23 Glyceryl Stearate SE IMWITOR® 960 K ● 23 Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 ● 35 Hydrogenated Palm Oil SOFTISAN® 154 ● 35	Glyceryl Ricinoleate	SOFTIGEN® 701 MTO , SOFTIGEN® 701 ECO MTO	0	31
Glyceryl Stearate SE IMWITOR® 960 K © 23 Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 © 35 Hydrogenated Palm Oil SOFTISAN® 154 © 35	Glyceryl Stearate		•	23
Hydrogenated Coco-Glycerides SOFTISAN® 100, SOFTISAN® 142 ● 35 Hydrogenated Palm Oil SOFTISAN® 154 ● 35	Glyceryl Stearate Citrate	IMWITOR® 372 P	•	23
Hydrogenated Palm Oil SOFTISAN® 154 ● 35	Glyceryl Stearate SE	IMWITOR® 960 K	•	23
	Hydrogenated Coco-Glycerides	SOFTISAN® 100, SOFTISAN® 142	•	35
Oleyl Erucate MIGLYOL® OE MTO	Hydrogenated Palm Oil	SOFTISAN® 154	•	35
	Oleyl Erucate	MIGLYOL® OE MTO	•	19

INCI	Trade Name	China compliant	Page
PCA Glyceryl Oleate	SOFTISAN® conditionHAIR	•	29
PEG-6 Caprylic/Capric Glycerides	SOFTIGEN® 767	•	37
Polyglyceryl-2 Caprate	SOFTISAN® PG2 C10	•	31
Polyglyceryl-3 Caprate	IMWITOR® PG3 C10	•	37
Polyglyceryl-3 Diisostearate	IMWITOR® PG3 DIS	•	24
Polyglyceryl-3 Polyricinoleate	IMWITOR® 600	•	24
Polyglyceryl-4 Cocoate	IMWITOR® PG4 Cocoate MTO		37
Propylene Glycol Dicaprylate/Dicaprate	MIGLYOL® PPG 810	•	16
Propylene Glycol Dicaprylate/Dicaprate (and) Stearalkonium Hectorite (and) Propylene Carbonate	MIGLYOL® Gel 840 B	•	32
Tricaprylin	WITARIX® MCT C8 WITARIX® MCT C8 pure coconut	• •	16
Tricaprylin (and) Acacia Senegal Gum	SOFTISAN® MagicPOWDER S (NEW)	•	29
Triheptanoin	MIGLYOL® T-C7	•	16
Trimyristin	DYNASAN® 114	•	35
Tristearin	DYNASAN® 118	•	35

 $As \ registration \ status \ can \ vary \ since \ printing, \ please \ refer \ to \ personal care @ioioleo. de \ for \ most \ updated \ status.$

- IECIC compliant
- IECIC & CSAR compliant

MTO Made-to-order

f 4

PERSONAL CARE
PERSONAL CAR

SELECTION CRITERIA GUIDE

		VEGAN	Aspo MIXED	NATURAL ADDORDING TO ISO 16128	ECOCERT WWW.COB. COSMOS APPROVED	NaTrue conform	(3)	HALAL
	Cold- process	Vegan	2-0002-04-100-02 Palm based	ISO 16128 NOI	ECOCERT approved	NaTrue conform	Kosher	Halal
EMOLLIENTS								
MIGLYOL® 829	✓	✓	MB	0.87			✓	✓
MIGLYOL® 829 ECO	✓	✓	MB	1.00			✓	✓
MIGLYOL® 8810	✓	✓	MB	0.79			✓	✓
MIGLYOL® 8810 ECO NEW	✓	✓	MB	1.00			✓	✓
MIGLYOL® Coco 810	✓	✓	MB	1.00	✓	✓	✓	✓
MIGLYOL® DO MTO	✓	\checkmark	MB	1.00	\checkmark	\checkmark	✓	✓
MIGLYOL® OE MTO	\checkmark	\checkmark	МВ	1.00	✓	\checkmark	✓	✓
MIGLYOL® PPG 810	✓	✓	МВ	0.79			✓	✓
MIGLYOL® T-C7	✓	✓		1.00	✓	✓	✓	✓
SOFTIGEN®PURA	✓	✓	МВ	1.00	✓	✓	✓	✓
SOFTISAN® 378		✓	МВ	1.00	✓	✓	✓	✓
WITARIX® MCT 60/40	✓	✓	МВ	1.00	✓	✓	✓	✓
WITARIX® MCT 60/40 coconut based	✓	✓		1.00	✓	✓	✓	✓
WITARIX® MCT 60/40 SG NEW MTO	✓	✓	SG	1.00	✓	✓		✓
WITARIX® MCT 70/30	✓	✓	MB	1.00	✓	✓	✓	✓
WITARIX® MCT C8	✓	✓	MB	1.00	✓	✓	✓	✓
WITARIX® MCT C8 pure coconut	✓	✓		1.00	✓	✓	✓	✓
EMULSIFIERS								
IMWITOR® 372 P		✓	МВ	1.00	✓	✓	✓	✓
IMWITOR® 375	✓	✓		1.00	✓	✓	✓	✓
IMWITOR® 491		✓		1.00	✓	✓	✓	✓
IMWITOR® 600	✓	✓		1.00	✓	✓	✓	✓
IMWITOR® 900 K		✓	МВ	1.00	✓	✓	✓	✓
IMWITOR® 948 MTO	✓	✓	МВ	1.00	✓	✓	✓	✓
IMWITOR® 960 K		✓	МВ	1.00	✓	✓	✓	✓
IMWITOR® GMIS	✓	✓		1.00	✓	✓		✓
IMWITOR® liteMULS	✓	✓	MB	1.00	✓	✓	✓	✓
IMWITOR® PG3 DIS	✓	✓		1.00	\checkmark	\checkmark		✓

	<u> </u>	VEGAN	ago.	NATURAL ACCOMPANIE ISO 16128	ECOCERT COSMOS	NaTrue conform	(3)	(J) HALAL
	Cold- process	Vegan	2-0002-04-100-02 Palm based	ISO 16128 NOI	ECOCERT approved	NaTrue conform	Kosher	Halal
MULTIFUNCTIONALS								
SOFTISAN® 645	✓	✓	MB	0.85				✓
SOFTISAN® 649	\checkmark	✓	MB	0.85				✓
SOFTISAN® conditionHAIR	\checkmark	\checkmark		1.00	\checkmark	✓	\checkmark	\checkmark
SOFTISAN® GC8	\checkmark	\checkmark	МВ	1.00	✓	✓	✓	✓
SOFTISAN® GC8 PalmFree	\checkmark	\checkmark		1.00	\checkmark	✓	\checkmark	\checkmark
SOFTISAN® MagicPOWDER S (NEW)	\checkmark	\checkmark		1.00	pending	pending		✓
SOFTISAN® PG2 C10	\checkmark	\checkmark	МВ	1.00	\checkmark	✓	\checkmark	✓
SOFTIGEN® 701 MTO	✓	✓		1.00				✓
SOFTIGEN® 701 ECO MTO	\checkmark	\checkmark		1.00	\checkmark	✓		\checkmark
IMWITOR® 742 MTO	✓	\checkmark	МВ	1.00	✓	✓	✓	\checkmark
SOLID LIPIDS & CONSISTENCY	AGENTS							
SOFTISAN® 100	✓	✓	MB	1.00	✓	✓	✓	✓
SOFTISAN® 142		✓	MB	1.00	✓	✓	✓	✓
SOFTISAN® 154		✓	MB	1.00	✓	✓	✓	✓
DYNASAN® 114		✓	MB	1.00	✓	✓		✓
DYNASAN® 118		✓	MB	1.00	✓	✓		✓
OLEOGELS & STABILIZING AGE	NTS							
MIGLYOL® Gel 840 B	✓	✓	МВ	0.74			✓	✓
MIGLYOL® Gel B	✓	✓	MB	0.94			✓	✓
SOLUBILIZERS & SURFACTANT	S							
IMWITOR® PG3 C10	✓	✓	MB	1.00	✓	✓	✓	✓
IMWITOR® PG4 Cocoate MTO	✓	✓	МВ	1.00	✓	✓	✓	✓
SOFTIGEN® 767	\checkmark	\checkmark	MB	0.00				\checkmark

 $As \ registration \ status \ can \ vary \ since \ printing, \ please \ refer \ to \ personal care @ioioleo. de \ for \ most \ updated \ status.$



PERSONAL CARE PERSONAL CARE

SIGNATURE TOUCH

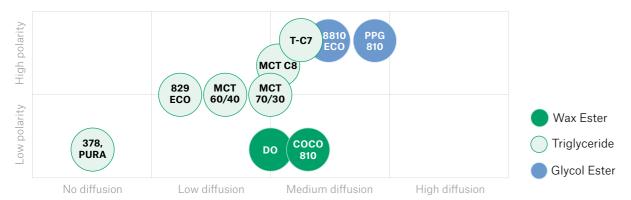
Design your signature touch in three easy steps!

The right choice of emollients underlines the claims of a formula and determines consumers repurchasing willingness.

1. CHOICE OF POLARITY

Typically, high polar and medium to high diffusion emollients ease the dispersibility of lipophilic crystalline UV-filters and facilitate pigment wetting.

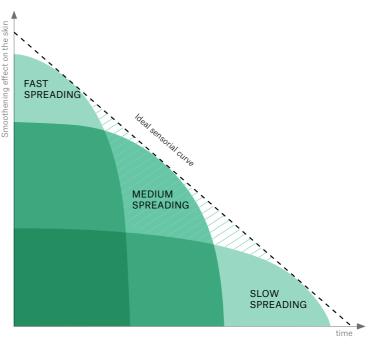
POLARITY VS. DIFFUSION



APPLICATIONS GUIDE

		¥==	<u></u>	Д		
Polarity		Skin Care	Sun Care	Color Care	Hair Care	Toiletries
	MIGLYOL® 8810 types	+++	+++	+++	++	+
HIGH	MIGLYOL® PPG 810	+++	+++	+++	++	+
	MIGLYOL® T-C7	+++	+++	+++	++	+
	WITARIX® MCT 60/40 types	+++	++	++	++	+++
MEDIUM	WITARIX® MCT 70/30	+++	++	++	++	+++
	WITARIX® MCT C8 types	+++	+++	+++	++	+
	MIGLYOL® 829 types	+++	++	+++	+++	+
	MIGLYOL® Coco 810	+++	++	++	+++	++
LOW	MIGLYOL® DO MTO	+++	+	++	+	++
LOW	MIGLYOL® OE MTO	+++	+	++	+	++
	SOFTIGEN®PURA	+++	+	++	+++	+
	SOFTISAN® 378	+++	+	+++	+++	+

2. CHOICE OF SPREADING BEHAVIOUR

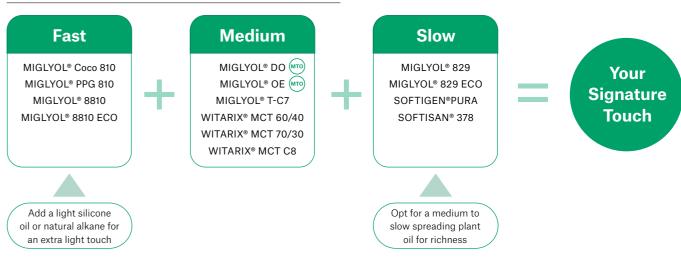


Spreading is a behavior based on passive force (diffusion) and active force (gliding effect). A pleasant spreading cascade is obtained with a combination of fast, medium and slow spreading emollients. By using various spreading behaviors, formulations will present instant and long lasting smoothness as well as no "sensorial gap" (often felt as drag or waxy during transition from massaging to after-feel).

REALIZATION:

- Fast spreading emollients give instant smoothness, but only little long-lasting gliding effect
- Medium spreading emollients connect fast and slow spreading emollients, enable a smooth transition on the skin and bring the formula close to the ideal sensorial curve
- **Slow spreading** emollients give long-lasting smoothing and gliding effect, but only little instant smoothness

CHOOSE EMOLLIENTS SPREADINGS BEHAVIOUR FROM BELOW



Did you know?

The spreading value (diffusion) is often influenced by viscosity, molecular weight and molecule size. Polarity is conditioned by e.g. molecule size & ratio of lipophilic and hydrophilic parts (e.g. OH groups).

8

PERSONAL CARE

SIGNATURE TOUCH

3. CHOICE OF INGREDIENT SENSORY

A complex task...

Silky, velvety, rich, greasy, sticky, comfortable...

Describing a sensory with a neutral feedback excluding personal judgement or variation of perception due to external conditions or cultural background is very complex. Even for trained experts.

... Based on simple parameters

However, a sensory is always the sum or the synergy of individual basic parameters.

IOI Oleo developed a simple method to break complex sensations into standardized measurable objective parameters. Some are here detailed to help you simply design your signature touch.



Gliding effect:

Spread in spiral pressure with the finger to evaluate braking effect



Oily / Greasy Effect:

Finger pinch movement evaluating absence of resistance and oily appearance



Penetration Rate:

Short defined period evaluation of product penetration rate into the skin



Film-Forming Effect:

Evaluation of the notion of residual film over the skin

But also to consider: stickiness, brilliance or more.

Contact us at: carestudio@ioioleo.de for further help.

Design your Signature Touch ...

Break complex multifactorial sensories in standardized measurable objective parameters



Flowing Silk... A sense of luxury

A silky touch is defined by

- medium to high gliding effect
- no to low film-forming
- no stickiness





Snuggle up in velvet and feel the cozyness

A velvet touch is defined by

- medium gliding effect
- medium film-forming
- no oiliness





Wrap yourself in rich and nourishing care

A rich touch is defined by

- low diffusion
- low penetration
- medium to high oiliness

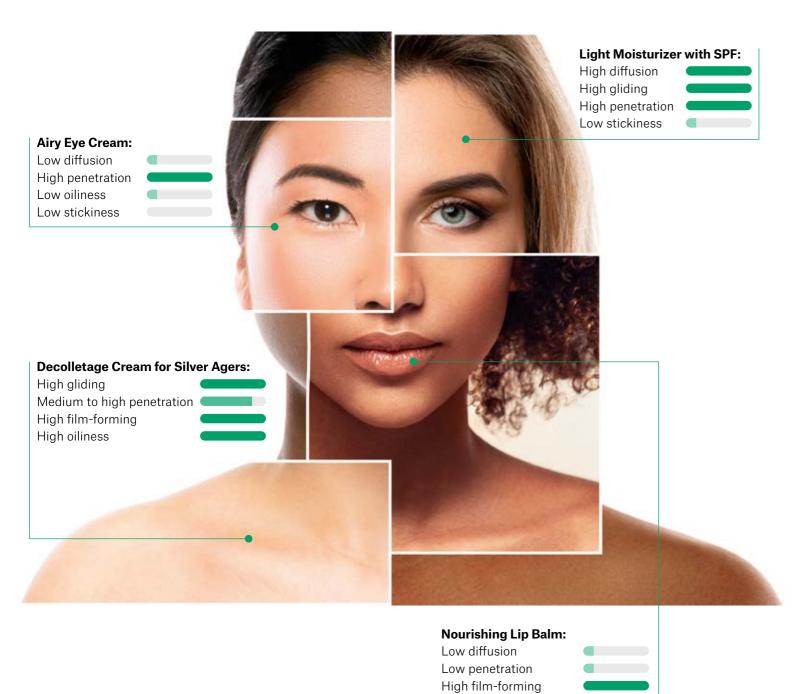


The sensory properties shown refer to end products and not to individual ingredients.

SIGNATURE TOUCH

Application – Sensory is key!

The desired sensory can vary depending on the place of application, weather, humidity, age, ethnicity and personal preferences.



Medium to high oiliness

Fast-Absorbing Hand Cream: High penetration Low film-forming Low oiliness Low stickiness Low diffusion

Caring Deodorant Stick: Medium diffusion

Medium to high gliding High penetration Low stickiness

Soft Body Lotion:

High diffusion High gliding High penetration Medium film-forming

Pampering Foot Balm:

High gliding Medium penetration Medium to high film-forming





PERSONAL CARE
PERSONAL CAR

SIGNATURE TOUCH



EMOLLIENTS

MIGLYOL® Coco 810 NEW DATA





INCI: Coco-Caprylate/Caprate

DIFFUSION: Medium **POLARITY:** Low

MIGLYOL® Coco 810 is a low polar emollient with a dry lightness and premium softness. Due to its sensorial profile, it can be considered a true alternative for light mineral oils and silicones (e.g., D5). This safe profile ingredient also offers skin moisturizing properties, making it the ideal solution for all types of skin care concepts and many other applications.

MIGLYOL® 8810 ECO (NEW) NEW DATA



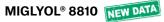




INCI: Butylene Glycol Dicaprylate/Dicaprate

DIFFUSION: Medium POLARITY: High

MIGLYOL® 8810 ECO is a medium diffusion, high gliding 100% natural based vegan emollient. Due to its high polarity, it easily solubilizes large amounts of UV-filters and contributes to better SPF retention. Acting as dispersing and wetting help for pigments in color care, it supports formulation of vibrant finished products. With its short playtime, MIGLYOL® 8810 ECO contributes to a water-light, non-oily, non-sticky skin feel.





INCI: Butylene Glycol Dicaprylate/Dicaprate

DIFFUSION: Medium

POLARITY: High

MIGLYOL® 8810 is a medium diffusion, high gliding natural based vegan emollient. Due to its high polarity, it easily solubilizes large amounts of UV-filters and contributes to better SPF retention. Acting as dispersing and wetting help for pigments in color care, it supports formulation of vibrant finished products. With its short playtime, MIGLYOL® 8810 contributes to a water-light, non-oily, non-sticky skin feel.

MIGLYOL® PPG 810



INCI: Propylene Glycol Dicaprylate/Dicaprate **DIFFUSION:** Medium (highest diffusion of

IOI Oleo emollient range)

POLARITY: High

MIGLYOL® PPG 810 leaves a light, non-oily, smooth and velvety skin sensation similar to low molecular weight silicone oils. Furthermore, it shows excellent dispersing and dissolving properties for pigments and UV-filters.

MIGLYOL® T-C7 NEW DATA







INCI: Triheptanoin **DIFFUSION:** Medium

POLARITY: High

MIGLYOL® T-C7 leaves a light, gently lubricating and velvety skin sensation. Due to its shorter chain length, this triglyceride has a high polarity and shows excellent dispersing and dissolving properties for pigments and UV-filters. The low viscosity makes it particularly suitable for use in wet wipe lotions.

WITARIX® MCT C8 NEW DATA







INCI: Tricaprylin **DIFFUSION:** Medium

POLARITY: Medium - High

WITARIX® MCT C8 is a true specialty! This sensory transforming eco-friendly emollient is based on 100% natural, vegan & renewable sources. With its rich-to-light transforming characteristics, it adds a surprising touch to every formula. Its medium diffusion properties and appealing oily and rich feel progressively turn into a very light, non-oily skin feel with striking silkiness and smoothness after absorption. Due to its high polarity, it also is a perfect fit for all sun and color care concepts. Broadly compatible, skin-loving and purely sustainable.

WITARIX® MCT C8 pure coconut







INCI: Tricaprylin **DIFFUSION:** Medium POLARITY: Medium - High

WITARIX® MCT C8 pure coconut is a true specialty! This sensory transforming eco-friendly emollient is based on 100% natural, vegan & renewable coconut sources. With its rich-to-light transforming characteristics, it adds a surprising touch to every formula. Its medium diffusion properties and appealing oily and rich feel progressively turn into a very light, non-oily skin feel with striking silkiness and smoothness after absorption. Due to its high polarity, it also is a perfect fit for all sun and color care concepts. Broadly compatible, skin-loving and purely sustainable.

MIGLYOL® DO (MTO)



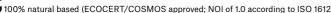


INCI: Decyl Oleate **DIFFUSION:** Low **POLARITY:** Low

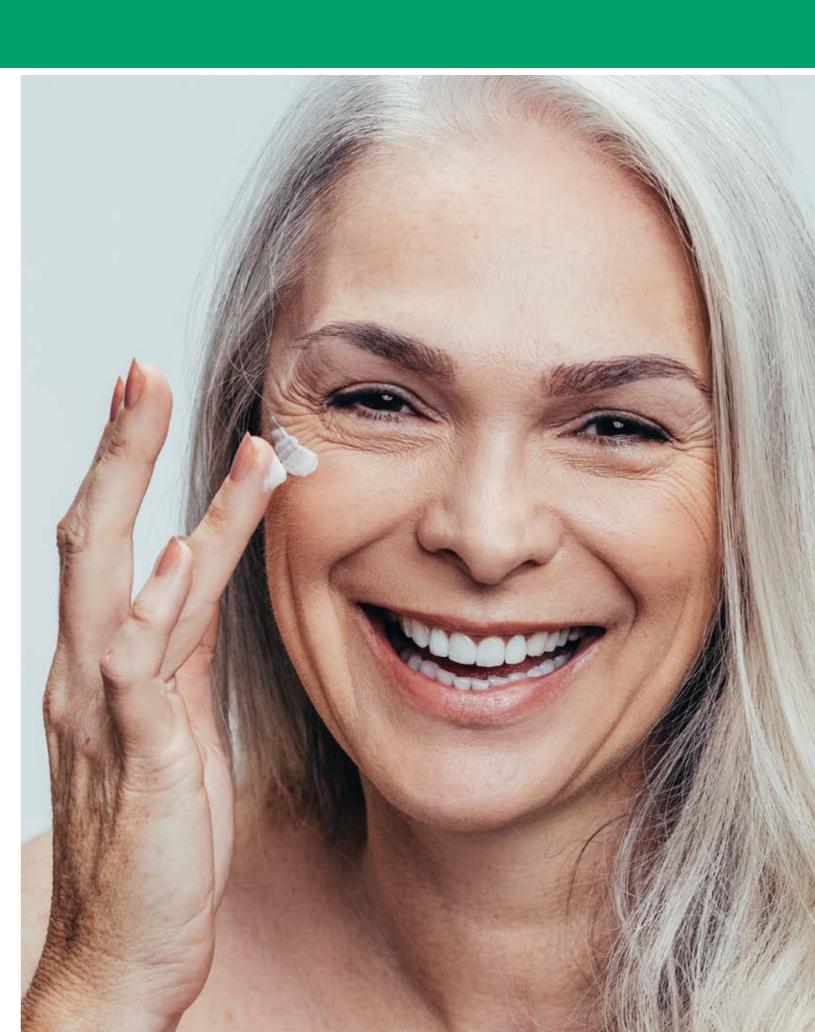
This low diffusion, low polar emollient helps to reduce the tackiness of care formulations. MIGLYOL® DO imparts a light, well-caring skin feel and is an interesting alternative to MCT oils.











EMOLLIENTS



WITARIX® MCT 60/40, WITARIX® MCT 60/40 coconut based, WITARIX® MCT 60/40 SG (NEW) (MTO)







INCI: Caprylic/Capric Triglyceride

DIFFUSION: Low POLARITY: Medium

WITARIX® MCT 60/40 types are low diffusion eco-friendly vegan emollients, based on 100% renewable & natural sources. They are the most widely used base for all kind of formulas and applications. The medium polarity allows easy wetting and dispersing of pigments and UV-filters. With a pleasant rich & oily nature, these versatile emollients are broadly compatible and contribute to all kind of signature touches, from light & silky to rich & luxurious.

WITARIX® MCT 70/30





INCI: Caprylic/Capric Triglyceride

DIFFUSION: Low POLARITY: Medium

WITARIX® MCT 70/30 has a higher amount of C8 fatty acid compared to WITARIX® MCT 60/40. This composition offers a lighter and more velvety sensoriality.

MIGLYOL® OE (MTO)







INCI: Oleyl Erucate **DIFFUSION:** Low **POLARITY:** Low

MIGLYOL® OE provides care and shine for skin, hair and color cosmetics and is a cost-effective alternative to Jojoba Oil. Along with its rich skin feel and long playtime it reduces tackiness of vegetable oils and other triglycerides.







INCI: Caprylic/Capric/Succinic Triglyceride

DIFFUSION: Low (lowest diffusion of IOI Oleo emollient range)

POLARITY: Medium

MIGLYOL® 829 is based on Caprylic/Capric Triglyceride units crosslinked with Succinic Acid to form a larger molecule with unique properties. Higher viscosity and low diffusion combined with an excellent lubrication effect give a rich but elegant skin sensation and long playtime. The density close to that of water provides extra stability in emulsions and allows to formulate twophase products with aqueous base.

MIGLYOL® 829 ECO NEW DATA





INCI: Caprylic/Capric/Succinic Triglyceride

DIFFUSION: Low (lowest diffusion of IOI Oleo emollient range)

POLARITY: Medium

MIGLYOL® 829 ECO is based on Caprylic/Capric Triglyceride units crosslinked with Succinic Acid to form a 100% natural molecule with unique properties. Higher viscosity and low diffusion combined with an excellent lubrication effect give a rich but elegant skin sensation and long playtime. The density close to that of water provides extra stability in emulsions and allows to formulate two-phase products with aqueous base.

SOFTIGEN®PURA NEW DATA





INCI: Caprylic/Capric Triglyceride (and) Hydrogenated Rapeseed Oil

DIFFUSION: No diffusion (pasty ingredient)

POLARITY: Low

SOFTIGEN®PURA is a blend of natural triglycerides of 100% vegetable origin. SOFTIGEN®PURA based products are easily spreadable and give a smooth and velvety skin feel. It is a multifunctional cream base (perfect for rich creams, balms and butters) with similar properties (stability against oxidation, moisturizing and film-forming) as petrolatum.



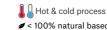


INCI: Caprylic/Capric/Myristic/Stearic Triglyceride

DIFFUSION: No diffusion (pasty ingredient)

POLARITY: Low

SOFTISAN® 378 is the "Melt-on-Touch" emollient that adds body and richness to formulas, moisturizes the skin and shows exceptional oxidative stability. It melts on skin contact and combines a rich, smooth powdery skin sensation to an oily, powdery/ velvety after-feel, similar to Shea Butter. But it will make you melt too! Thanks to its caressing, comforting skin feel as well as sustainable eco-friendliness, you will fall for the tendernesspacked SOFTISAN® 378.







SIGNATURE TEXTURE



A stable base is what you need!

The two main emulsion types are Oil-in-Water (O/W) and Water-in-Oil (W/O). What is same for both: You need an emulsifier to create a stable formula.

O/W Emulsifiers	Process	INCI	Charge	Texture	Max % Oil	HLB'
IMWITOR® 372 P	<u></u>	Glyceryl Stearate Citrate	Anionic		66666	10 - 12
IMWITOR® 375		Glyceryl Citrate/Lactate/Linoleate/ Oleate	Anionic		***	10 - 12
IMWITOR® 960 K	<u></u>	Glyceryl Stearate SE	Anionic		6666 0	9 - 12
IMWITOR® liteMULS		Glyceryl Citrate/Lactate/Linoleate/ Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate	Partly anionic & non-ionic			10 - 12
O/W Co-Emulsifiers	Process	INCI	Charge	Texture	Max % Oil	HLB'
IMWITOR® 491	<u></u>	Glyceryl Stearate	Non-ionic		***	4
IMWITOR® 742 MTO		Caprylic/Capric Glycerides	Non-ionic			5 - 6
IMWITOR® 900 K	<u></u>	Glyceryl Stearate	Non-ionic		••••	4
IMWITOR® 948 MTO		Glyceryl Oleate	Non-ionic			3
IMWITOR® GMIS	18	Glyceryl Isostearate	Non-ionic			4
W/O Emulsifiers	Process	INCI	Charge	Texture	Max % Oil	HLB'
IMWITOR® 600		Polyglyceryl-3 Polyricinoleate	Non-ionic		***	4
IMWITOR® PG3 DIS		Polyglyceryl-3 Diisostearate	Non-ionic			5
W/O Co-Emulsifiers	Process	INCI	Charge	Texture	Max % Oil	HLB'
IMWITOR® 948 MTO		Glyceryl Oleate	Non-ionic			3
IMWITOR® GMIS		Glyceryl Isostearate	Non-ionic			4

*HLB estimated or calculated





O/W EMULSIFIERS



Emulsifiers

IMWITOR® 372 P





INCI: Glyceryl Stearate Citrate

APPEARANCE: White to yellowish flakes

RECOMMENDED CONCENTRATION: 0.5 - 4.0%

HLB: 10 - 12

Optimal pH: 4.5 - 7.0

IMWITOR® 372 P is THE natural classic for modern and sustainable emulsions. This anionic O/W emulsifier comes in easy-to-handle flakes allowing easy processing. Its robust, reliable nature as well as broad compatibility make this viscosity-building ingredient a great fit for various concepts, be it multiple textures (lotion, cream and butter) or applications (baby, skin or hair care). Formulas based on this emulsifier offer easy pick-up, uniform spreading and a pleasant smooth & soft after-feel. Create versatility while maintaining stability with this vegan, natural renewable ingredient!

IMWITOR® 375 NEW DATA







INCI: Glyceryl Citrate/Lactate/Linoleate/Oleate

APPEARANCE: Yellowish liquid (honey-like) **RECOMMENDED CONCENTRATION:** 0.5 - 3.0%

HLB: 10 - 12

Optimal pH: 4.5 - 7.0

IMWITOR® 375 is a natural-based anionic O/W liquid emulsifier offering feather-light sensory for a variety of textures and applications. IMWITOR® 375 presents unique benefits for planetconscious consumers, creative formulators, but also time- and cost-conscious manufacturers. With a safe food-approved profile from natural sources based on sunflower, it helps to speed up developments and processes for a final comfortable light touch, from sprays to creams.

IMWITOR® liteMULS





INCI: Glyceryl Citrate/Lactate/Linoleate/Oleate (and) Polyglyceryl-4 Cocoate (and) Polyglyceryl-3 Caprate (and) Glyceryl Caprylate

APPEARANCE: Yellowish liquid (honey-like) **RECOMMENDED CONCENTRATION:** 0.5 - 2.0%

HLB: 10 - 12

Optimal pH: 4.5 - 7.0

100% natural, easy-to-use O/W emulsifier blend. Especially suitable for low viscous emulsions like wet wipe liquids. IMWITOR® liteMULS is also ideal for self-emulsifying bath oils.

IMWITOR® 960 K



INCI: Glyceryl Stearate SE

APPEARANCE: White to yellowish flakes **RECOMMENDED CONCENTRATION:** 2.0 - 7.0%

Optimal pH: 6.8 - 8.5

IMWITOR® 960 K is a classic anionic emulsifier for rich creams and butters. Works best at neutral pH. This self-emulsifying glyceryl stearate quality has a monoester content of approx. 30%.

Co-Emulsifiers

IMWITOR® 491



INCI: Glyceryl Stearate

APPEARANCE: White powder

RECOMMENDED CONCENTRATION: 1.0 - 3.0%

IMWITOR® 491 is a non-ionic O/W co-emulsifier with a monoester content of minimum 90%. It enhances the consistency of O/W emulsions.

IMWITOR® 900 K



INCI: Glyceryl Stearate

APPEARANCE: White powder

RECOMMENDED CONCENTRATION: 1.0 - 3.0%

IMWITOR® 900 K is a non-ionic O/W co-emulsifier with a monoester content of 40 - 55%. It acts as a co-emulsifier and consistency enhancer in O/W emulsions.



W/O EMULSIFIERS

Emulsifiers

IMWITOR® 600



INCI: Polyglyceryl-3 Polyricinoleate

APPEARANCE: Yellow liquid **RECOMMENDED CONCENTRATION:** 2 - 4%

IMWITOR® 600 is the emulsifier for the out-of-ordinary W/O skin feel! This naturally soft emulsifier offers a soft, non-waxy and non-oily sensory combined with a mild profile. Originated from the sweet world of chocolates, this safe ingredient is a staple in concepts from baby, color to sun care. Be it various textures (from fluid to buttery), a very broad compatibility and flexibility in terms of oil and water phase or pigment wetting properties - The 100% natural and vegan W/O emulsifier offers full flexibility to all formulators!

IMWITOR® PG3 DIS





INCI: Polyglyceryl-3 Diisostearate APPEARANCE: Slightly yellowish liquid **RECOMMENDED CONCENTRATION:** 1 - 4%

HLB: 5

IMWITOR® PG3 DIS is a non-ionic emulsifier for W/O emulsions. In combination with IMWITOR® 600, it forms stable and light emulsions. IMWITOR® PG3 DIS also shows excellent dispersing properties for pigments and anorganic sunscreens.

O/W & W/O Co-Emulsifiers

IMWITOR® 948 MTO





INCI: Glyceryl Oleate

APPEARANCE: Yellow liquid

RECOMMENDED CONCENTRATION: 1 - 3%

IMWITOR® 948 is a versatile non-ionic co-emulsifier with a monoester content of 32-52% that can be used in W/O and O/W emulsions. Glyceryl Oleate improves penetration of emollients into the stratum corneum and enhances skin elasticity. Used in body washes, Glyceryl Oleate reduces skin roughness caused by surfactants. Glyceryl Oleate is also part of human hair lipids. Once adsorbed by the hair, it reduces roughness, thus decreasing combing force of wet hair and enhancing hair gloss.

IMWITOR® GMIS



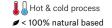


INCI: Glyceryl Isostearate

APPEARANCE: Slightly yellowish liquid **RECOMMENDED CONCENTRATION:** 1 - 3%

Co-Emulsifier for O/W and W/O emulsions. This ingredient can be used as skin-conditioning agent. The 100% natural IMWITOR® GMIS is an excellent film former, too.



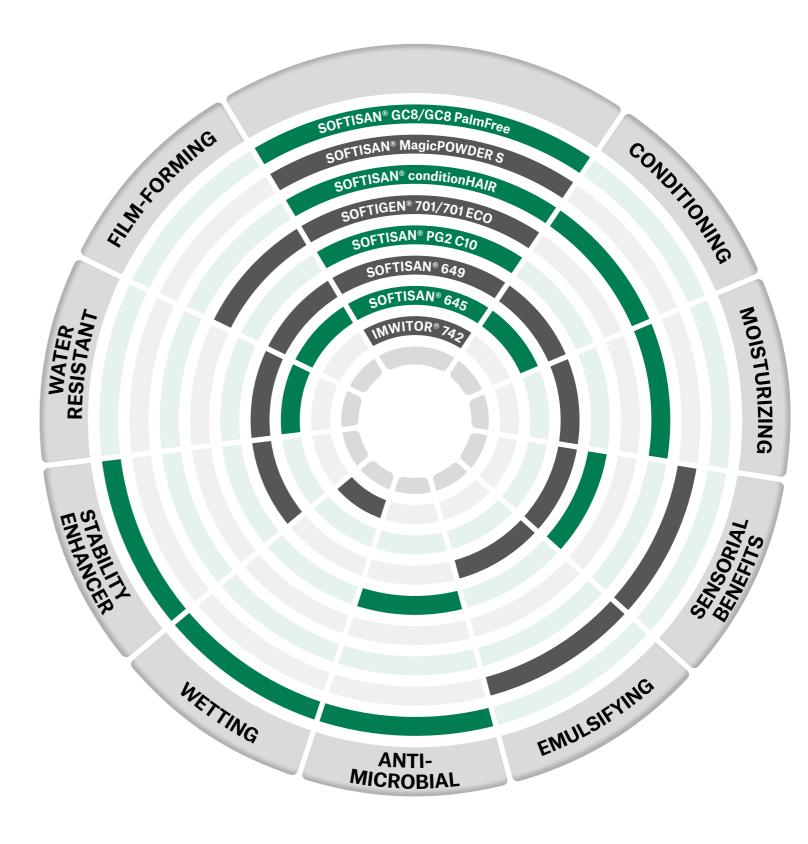




MULTIFUNCTIONALS

Multifunctionals ease your daily life!

EASY Simplify **POPULAR** development Shorter INCI List • Cold-processable · Less references • All kind of equipment to manage possible One ingredient, **TIME SAVER** many functions! **BOOSTER** Less manipulation • Same or better (just one ingredient functionality and to weigh and process) £03 performance Less time lost **EFFICIENT** Cost-efficient · Easier sourcing (1 ingredient instead of 2 or more..) · Less space used in warehouse and lab



26 27

MULTIFUNCTIONALS



Conditioning & Moisturizing Agents

SOFTISAN® conditionHAIR NEW DATA







INCI: PCA Glyceryl Oleate

APPEARANCE: Yellow viscous (honey-like) liquid **RECOMMENDED CONCENTRATION: 0.5 - 2.0%**

Optimal pH: 4.0 - 7.0 (pH < 5.5 for natural cationic charge)

SOFTISAN® conditionHAIR is an universal natural cationic conditioner for hair and skin. It acts as deposition aid in hair care applications to improve wet combing and offers moisturization.

SOFTISAN® conditionHAIR is one molecule, based on Pyrrolidone Carboxylic Acid (PCA) and Glyceryl Oleate. PCA is part of the Natural Moisturizing Factor (NMF) of the skin and is responsible for the moisturizing benefits on skin and scalp.

Film-Forming, Conditioning, **Moisturizing & Sensorial Agents**

SOFTISAN® 645





INCI: Bis-Diglyceryl Polyacyladipate-1 APPEARANCE: Yellowish high viscous fluid

RECOMMENDED CONCENTRATION: 1.0 - 30.0%

SOFTISAN® 645 is a vegan, vegetable-based liquid multifunctional with high water-binding capacity and good adhesion to the skin. The ingredient is non-occlusive and in comparison to lanolin oil virtually odorless. The excellent skin compatibility is proven.

SOFTISAN® 649 NEW DATA





INCI: Bis-Diglyceryl Polyacyladipate-2

APPEARANCE: Yellowish viscous paste

RECOMMENDED CONCENTRATION: 0.5 - 30.0%

SOFTISAN® 649 is a vegan, all-purpose ingredient offering a highly substantive protecting and moisturizing film for an improved skin barrier. This is due to its unique chemical 3D-structure providing both water-resistance and water-binding capacities, like lanolin. The safe and widely used ingredient provides a smooth and caring sensoriality for high performance cosmetics.

This all-purpose ingredient can be used for e.g., moisturizing and skin barrier protecting formulas, long-lasting color care, effective hair care or water-resistant sun or baby care.

Sensorial Benefits & Emulsifying Agents

SOFTISAN® MagicPOWDER S







INCI: Tricaprylin (and) Acacia Senegal Gum

APPEARANCE: Ivory powder

RECOMMENDED CONCENTRATION: 20 - 50% in powder

Cold-processable transforming ingredient allowing simple powder-to-emulsion on-the-go formulas with soft after-feel.

Opening new frontiers for consumer experience or Do-It-Yourself vegan cosmetics, this technological breakthrough instantaneously produces a soft emulsion with the simple addition of water, without use of specific equipment.

Safe, 100% natural origin based, China compliant and with a minimalistic INCI, SOFTISAN® MagicPOWDER S additionally offers emolliency and skin softness for very versatile applications and customized concepts.

<u>Did you know?</u>

- SOFTISAN® MagicPOWDER S offers unique instant emulsification. Simple process: Just add water, no specific equipment needed. Natural, sustainable and fun
- SOFTISAN® conditionHAIR offers the highest natural performance for hair conditioning
- SOFTISAN® 649 is used in color cosmetics to increase adhesion of pigments to the skin for long-lasting performance

MULTIFUNCTIONALS



Sensorial & Anti-Microbial Agents

SOFTISAN® PG2 C10





INCI: Polyglyceryl-2 Caprate

APPEARANCE: Clear viscous liquid

RECOMMENDED CONCENTRATION: 0.5 - 3.0%

SOFTISAN® PG2 C10 is a multifunctional product that combines caring (refatting and moisturizing) with antimicrobial properties and improves the soft touch of emulsions. The polar head consisting of two glycerol units helps to moisturize hair and skin. Due to the antimicrobial properties, SOFTISAN® PG2 C10 represses unpleasant body odors in deo concepts.

Stability Enhancing, Anti-Microbial & Wetting Agents

SOFTISAN® GC8*





INCI: Glyceryl Caprylate

APPEARANCE: White paste or clear liquid, depending on temperature

RECOMMENDED CONCENTRATION: 0.1 - 2.0%

SOFTISAN® GC8 is the natural multichallenge-solving ingredient that simplifies formulator's life and production processes for safe applications from A to Z. Its amphiphilic structure enhances emulsion stability by decreasing the droplet size in O/W emulsions. It eases anti-microbial boosting, both in conventional and alternative preservative systems. Color care concepts benefit from its wetting properties. RSPO MB certified, vegan, eco-friendly.

SOFTISAN® GC8 PalmFree*





INCI: Glyceryl Caprylate

APPEARANCE: White paste or clear liquid, depending on temperature

RECOMMENDED CONCENTRATION: 0.1 - 2.0%

SOFTISAN® GC8 PalmFree is the natural multichallenge-solving ingredient that simplifies formulator's life and production processes for safe applications from A to Z. Its amphiphilic structure enhances emulsion stability by decreasing the droplet size in O/W emulsions. It eases anti-microbial boosting, both in conventional and alternative preservative systems. Color care concepts benefit from its wetting properties. Made from renewable sources, vegan & eco-friendly!

Wetting Agents

IMWITOR® 742 MTO



INCI: Caprylic/Capric Glycerides

APPEARANCE: White-yellowish paste or yellowish liquid, depending on temperature

HLB: 5 - 6

RECOMMENDED CONCENTRATION: 0.2 - 25.0%

IMWITOR® 742 is a non-ionic O/W co-emulsifier, which can be used in cosmetic formulations as a dispersant and wetting agent for active ingredients and pigments. Due to its lipophilicity, it can be easily incorporated into oil phases.

Refatting & Film-Forming Agents

SOFTIGEN® 701 MTO





INCI: Glyceryl Ricinoleate

APPEARANCE: Yellowish pasty liquid

RECOMMENDED CONCENTRATION: 0.5 - 4.0%

SOFTIGEN® 701 can be used in almost any skin care preparations such as creams, lotions, bath oils, shaving formulations, refatting soap and shower formulations. SOFTIGEN® 701 is well tolerated by the skin and mucosa.

SOFTIGEN® 701 ECO (MTO







INCI: Glyceryl Ricinoleate (and) Tocopherol APPEARANCE: Yellowish pasty liquid

RECOMMENDED CONCENTRATION: 0.5 - 4.0%

SOFTIGEN® 701 ECO can be used in almost any skin care preparations such as creams, lotions, bath oils, shaving formulations, refatting soap and shower formulations. SOFTIGEN® 701 ECO is well tolerated by the skin and mucosa.



OLEOGELS STABILIZING AGENTS

MIGLYOL® Gel B



INCI: Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonate

APPEARANCE: Rose-beige paste

RECOMMENDED CONCENTRATION: 1 - 40%

Heat-stable oleogel based on Caprylic/Capric Triglyceride. Because of its high thermal stability, MIGLYOL® Gel B is recommended for the use as consistency regulator in cosmetic preparations where it is important to maintain viscosity over a wide temperature range. It promotes the thermostability of color cosmetics and prevents bleeding and blurring in stick formulations.

MIGLYOL® Gel 840 B





INCI: Propylene Glycol Dicaprylate/Dicaprate (and) Stearalkonium Hectorite (and) Propylene Carbonate

APPEARANCE: Rose-beige paste

RECOMMENDED CONCENTRATION: 1 - 40%

Heat-stable oleogel based on Propylene Glycol Dicaprylate/ Dicaprate. Because of its high thermal stability, MIGLYOL® Gel 840 B is recommended for the use as consistency regulator in cosmetic preparations where it is important to maintain viscosity over a wide temperature range. It promotes the thermostability of color cosmetics and prevents bleeding and blurring in stick formulations.

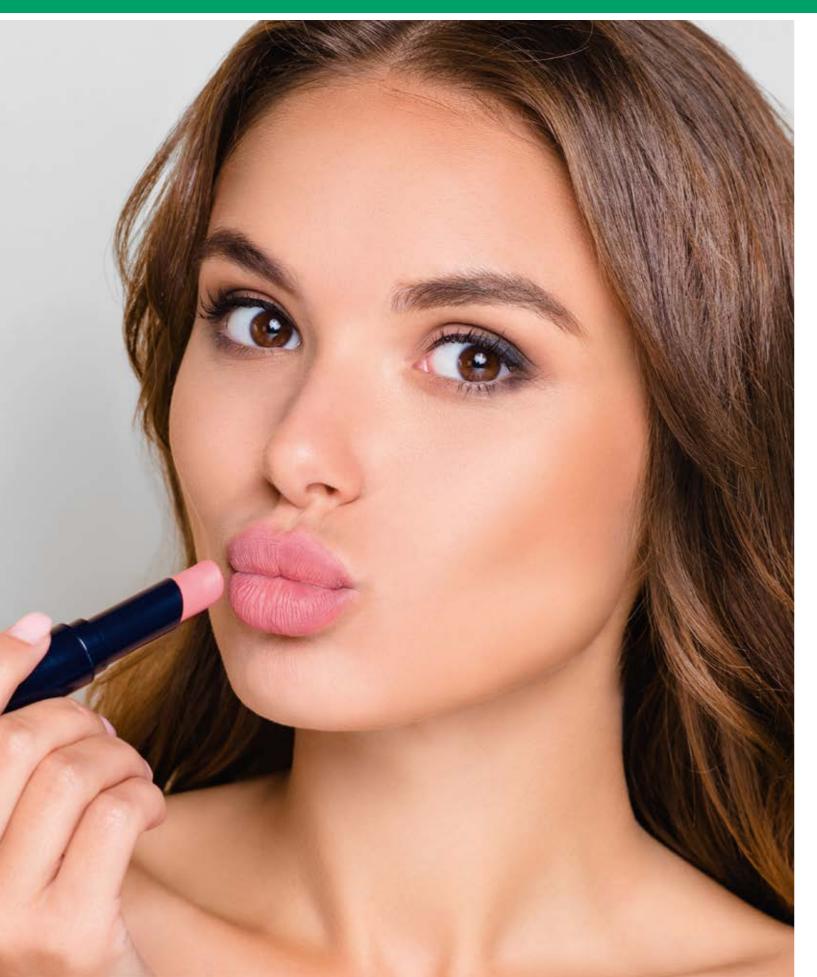
Did you know?

- MIGLYOL® Oleogels show a thixotropic behaviour and offer thickening and suspending, yet ease the spreading
- Oleogels are used as dispersion aid for UV filters, enhance the formulation stability, particularly at elevated temperatures and prevent leaking oil from waterless formulas like lipsticks or balms
- They offer a pleasant sensory: Silky, rich, velvety, non-heavy & soft skin feel





SOLID LIPIDS CONSISTENCY AGENTS



SOFTISAN® 100







DYNASAN® 114



INCI: Hydrogenated Coco-Glycerides

SOFTISAN® 142







INCI: Hydrogenated Coco-Glycerides

SOFTISAN® 154

INCI: Hydrogenated Palm Oil

APPEARANCE: White pellets or flakes

RECOMMENDED CONCENTRATION: 1.0 - 30.0%

SOFTISAN® 100, 142 & 154 are pure solid lipids that have very sharp melting ranges and exceptional hardness at room temperature.

Melting range:

33.5 - 35.5°C (SOFTISAN® 100)

42.0 - 44.0°C (SOFTISAN® 142)

53.0 - 58.0°C (SOFTISAN® 154)

The small interval between melting and solidification points allows a rapid and economic processing. All SOFTISAN® Solid Lipids can be heated far beyond their melting points without changing their fast solidification time and good contractility.

They impart body and structure to any kind of emulsion or anhydrous formula and can be used for in-shower products as film former (especially SOFTISAN® 100). By combining two or more SOFTISAN® Solid Lipid types, any melting profile can be achieved (33.5 - 58.0°C). Therefore, they are highly recommended for all stick applications like lipstick or eyebrow pencils.

These solid lipids are based on triglycerides of blends of natural, saturated, even-numbered unbranched fatty acids with a chain length of C12-C18. They have a neutral odor and taste and are exceptionally resistant against oxidation.

INCI: Tristearin

APPEARANCE: White powder

RECOMMENDED CONCENTRATION: 0.5 - 5.0%

DYNASAN® 114 and DYNASAN® 118 are consistency agents and viscosity adjusters for water-free, oil-based products and emulsions.

DYNASAN® types are used as adjuvants in stick formulations and as crystallization accelerators and seeding agents to improve the solidification process. Furthermore, they can be used in creams and lotions as body-imparting and structure-forming components.

In oil phases, both types are viscosity controlling and thickening agents.

The DYNASAN® types are triesters of glycerin and myristic acid

DYNASAN® 114 and 118 are highly stable against oxidation and have a neutral odor and taste. The stable β-modification has a very sharp melting point and a triclinic structure.

Melting range:

55.0 - 60.0°C (DYNASAN® 114)

69.0 - 73.0°C (DYNASAN® 118)

Did you know?

- SOFTISAN® 100, 142 and 154 are used in many color cosmetics applications
- Coming from our manufacturing plant operating under Pharma GMP standard, the quality of our products is unrivalled
- SOFTISAN® 100 also acts as main filmforming agent in shower creams and in-shower body lotion concepts

SOLUBILIZERS SURFACTANTS



IMWITOR® PG3 C10





INCI: Polyglyceryl-3 Caprate

APPEARANCE: Yellowish viscous liquid

RECOMMENDED CONCENTRATION: 1.0 - 3.0%

IMWITOR® PG3 C10 is an excellent refatting agent and provides a soft skin feel. It helps to increase the viscosity of shampoos or shower gels and to enhance foam properties of rinse-off products. Its mild antimicrobial and deodorizing effect can be used in various formulations.

IMWITOR® PG4 Cocoate (MTO)







INCI: Polyglyceryl-4 Cocoate

APPEARANCE: Clear to yellowish viscous liquid **RECOMMENDED CONCENTRATION:** 1.0 - 5.0%

In combination with other surfactants, IMWITOR® PG4 Cocoate can be beneficially incorporated to improve skin feel, mildness, foam characteristics, and to ease the formulation of hydrophobic ingredients like fragrances or oil components.

SOFTIGEN® 767



INCI: PEG-6 Caprylic/Capric Glycerides

APPEARANCE: Yellowish liquid

RECOMMENDED CONCENTRATION: 0.5 - 5.0%

HLB: 14

SOFTIGEN® 767 is a water-loving emollient highly popular for its mild yet powerful performance. It adds comfort to any leave-on, rinse-off or surfactant formula, providing a thin caring refatting film that prevents from skin drying. Vegan & RSPO MB renewable sources, manufactured in a pharmaceutical environment, mild top-quality reference: SOFTIGEN® 767 provides the trust you need for any topical applications.

<u>Did you know?</u>

- SOFTIGEN® 767 is one of the most popular surfactants for micellar water concepts
- Wet wipe applications benefit from SOFTIGEN® 767 due to the dual effect of gentle cleansing and noticeable emolliency



DISTRIBUTION PARTNERS

EUROPE

AUSTRIA

Biesterfeld Spezialchemie Austria GmbH & Co. KG Mail: y.claus@biesterfeld.com www.biesterfeld.com

BELARUS

Chemical Centre, LLC
Mail: e.trubechkova@chemical-centre.com
www.chemical-centre.com

BENELUX

IMCD Benelux B.V. Mail: info@imcd.nl www.imcdgroup.com

BULGARIA, ROMANIA, MACEDONIA

Checoma

Mail: pmakedonski@checoma.com www.checoma.com/en/

CROATIA, SERBIA, SLOVENIA

Biesterfeld Spezialchemie d.o.o. Mail: p.vuksan@biesterfeld.com www.biesterfeld.com

CZECH REPUBLIC

Biesterfeld Silcom s.r.o. Mail: terezie.sestakova@bisi.cz www.bisi.cz

DENMARK, NORWAY, SWEDEN, FINLAND

AJDK ApS Mail: info@ajdk.dk www.ajdk.org

ESTONIA, LATVIA, LITHUANIA

Biesterfeld Chemia Specjalna Sp. z o.o. Mail: j.matvejevs@biesterfeld.lv www.biesterfeld-chemiaspecjalna.pl

FRANCE

IMCD France SAS Mail: info@imcd.fr www.imcdgroup.com

GERMANY

Biesterfeld Spezialchemie GmbH Mail: j.garleff@biesterfeld.com www.biesterfeld.com

GREECE, CYPRUS

Cellco Chemicals SA Mail: cellco@cellco.gr www.cellco.gr

HUNGARY

Biesterfeld Speciális Kemikáliák Magyarország Kft Mail: sz.vereckei@biesterfeld.hu www.biesterfeld.com

ITALY

Eigenmann & Veronelli SpA Mail: info@eigver.it www.eigver.it

POLAND

Biesterfeld Chemia Specjalna Sp. z o.o. Mail: r.borzyminska@biesterfeld.com.pl www.biesterfeld-chemiaspecjalna.pl

PORTUGAL

OXI-MED EXPRES S.A.

Mail: info@oximedexpres.com
www.oximedexpres.com/en/

RUSSIA

Eigenmann & Veronelli - Russo Mail: eshcheveleva@eigver.ru www.eigver.ru

SLOVAK REPUBLIC

Biesterfeld Silcom Slovakia s.r.o. Mail: svetlana.souckova@bisi.cz www.bisi.cz

SPAIN

OXI-MED EXPRES S.A.

Mail: info@oximedexpres.com
www.oximedexpres.com/en/

SWITZERLAND

Biesterfeld Helvetia AG Mail: y.claus@biesterfeld.com www.biesterfeld.com

TURKEY

Biesterfeld Özel Kimyasallar Ticaret A.S., Mail: aytul.demirel@biesterfeld.com.tr www.biesterfeld.com.tr

UK, IRELAND

Safic Alcan UK Limited
Mail: dawn.goff@safic-alcan.co.uk
www.safic-alcan.co.uk

UKRAINE

LLC Biesterfeld Spezialchemie Ukraine Mail: o.khondzinskaya@biesterfeld.com www.biesterfeld.com

ASIA-PACIFIC

AUSTRALIA, NEW ZEALAND

Avenir Ingredients

Mail: office@aveniringredients.com.au www.aveniringredients.com.au

CHINA EAST

Shanghai Syntec Additive Ltd. Mail: info@syntecsh.cn www.syntecsh.cn

CHINA SOUTH

Ownsnow Chemical Co., Ltd. Mail: info@ownsnow.com.cn www.ownsnow.com.cn

INDIA

Parkash Dyechem Pvt. Ltd.

Mail: mail-aroranaresh@parkashgroup.com

www.parkashgroup.com

INDONESIA

PT. Tentrem Artha Nugraha Mail: cs@pttentrem.com www.pttentrem.com

JAPA

Watahan Trading Co., Ltd. Mail: n_jeon@watahan.co.jp www.watahan.co.jp

KOREA

Intercare Co., Ltd.

Mail: intercare@intercare.co.kr

www.intercare.co.kr

MALAYSIA, SINGAPORE

Kimiya Pure Sdn Bhd Mail: admin@kimiyapure.com

PAKISTAN

Alternative Chemicals Pvt. Ltd.

Mail: shabbir@alternativechemicals.com
www.alternativechemicals.com

PHILIPPINES

Environatural Corporation Mail: dfladia@enc.com.ph www.enc.com.ph

TAIWAN

HonorChem Co., Ltd.
Mail: service@honorchem.com
www.honorchem.com

THAILAND

The Sun Chemical Co., Ltd.
Mail: jindaporn@thesunchemical.co.th
www.thesunchemical.co.th

VIETNAM

Smart Ingredients Co., Ltd.

Mail: smart.ingredients@smart-ingredients.com.vn

www.smart-ingredients.com.vn

38 39

DISTRIBUTION PARTNERS

AMERICAS

ARGENTINA

Etilfarma S.A. Mail: contacto@etilfarma.com

Mail: contacto@etilfarma.co www.etilcare.com

BRAZIL

PIC Quimica

Mail: schwartzman@pic-web.com.br www.pic-web.com.br

CANADA

Univar Solutions Mail: zohreh.fakhim@univar.com www.univar.com

CHILE

Ascoex Ltda

Mail: ascoex@ascoex.com www.ascoex.cl

COLOMBIA

SUMIQUIM Suministros Químicos S.A.S. Mail: acantillo@sumiquim.com www.sumiquim.com

MEXICO

Noregal, S.A. de C.V. Mail: norma.reyes@noregal.com.mx www.noregal.com.mx

USA - NORTHEAST

ees cosmetic solutions
Mail: info@eescosmetic.com
www.eescosmetic.com

USA - SOUTHEAST

Warner Graham Company Mail: info@warnergraham.com www.warnergraham.com

USA - WEST

TCR Industries
Mail: info@tcrindustries.com
www.tcrindustries.com

MIDDLE EAST

ISRAEL

Tagra Biotechnologies Ltd. Mail: distribution@tagra.com www.tagra.com

LEBANON, EGYPT, UAE, KSA, JORDAN

Performance Ingredients

Mail: bab@performance-ingredients.com

AFRICA

ALGERIA

Azelis Algeria Mail: ali.aissiou@azelis.com www.azelis.com

MOROCCO

Mazhar Fine Chemicals Mail: atazi@mazhar.ma www.mazhar.ma

SOUTH AFRICA

CJP Chemicals

Mail: judyn@cjpchemicals.co.za

www.cjpchemicals.co.za

TUNISIA

Azelis Tunisia

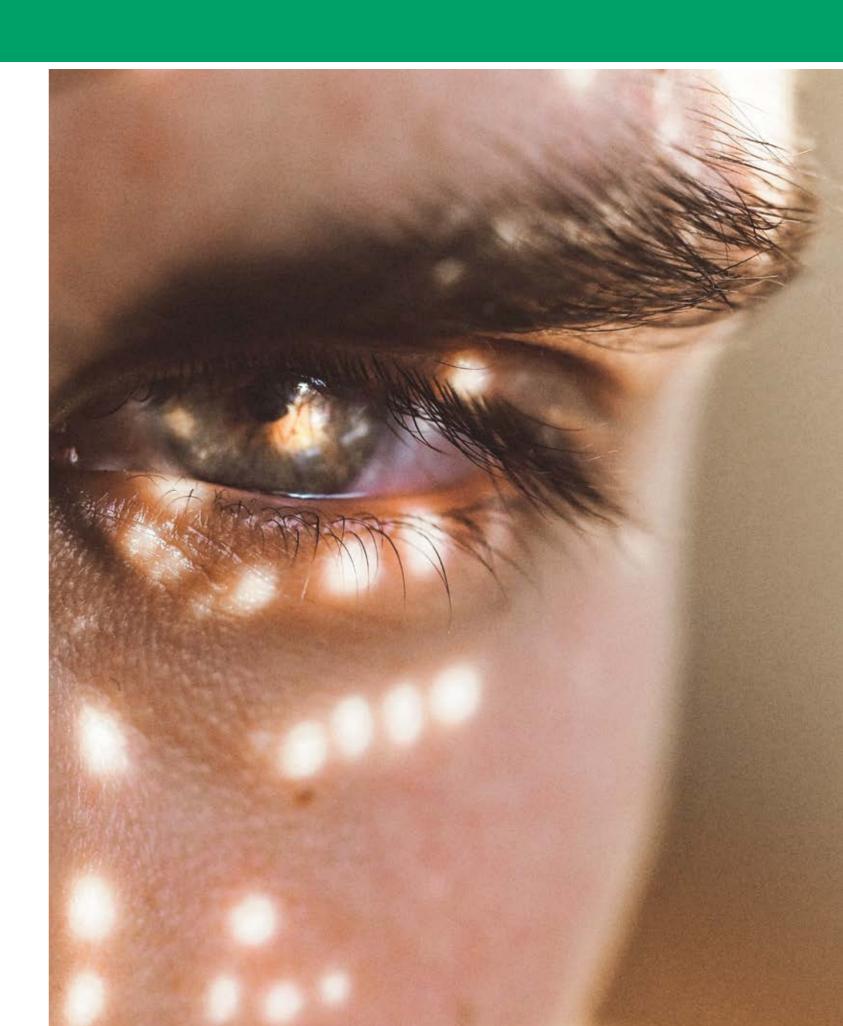
Mail: hela.chaoui@azelis.com

www.azelis.com

Important notice: All trademarks displayed in this brochure are the property of IOI Oleochemical's group of companies except as otherwise marked. Users of this brochure are not permitted to use these trademarks without the prior written consent of their proprietor. All rights are reserved. Reference to trademarks used by other companies is neither a recommendation, nor should it give the impression that products of other companies cannot be used.

Disclaimer: IOI Oleo GmbH makes no representations or warranties, neither express nor implied, on the suitability for any specific applications of the products to which the information refers. In particular, the customer is fully responsible to determine end-use suitability and is not exempted from the obligation to conduct careful inspection and testing of incoming goods.

V3.0





As experts in sustainable natural esters, IOI Oleo GmbH supports leading cosmetics companies creating successful brand sensory by giving their products a unique signature touch.

We design and manufacture specialty ingredients providing sensorial benefits leading to emotional experiences.

That's what we call "Touching Technologies".

IOI Oleo GmbH

Hamburg, Germany +49 40 28 00 31-0 personalcare@ioioleo.de www.ioioleo.de