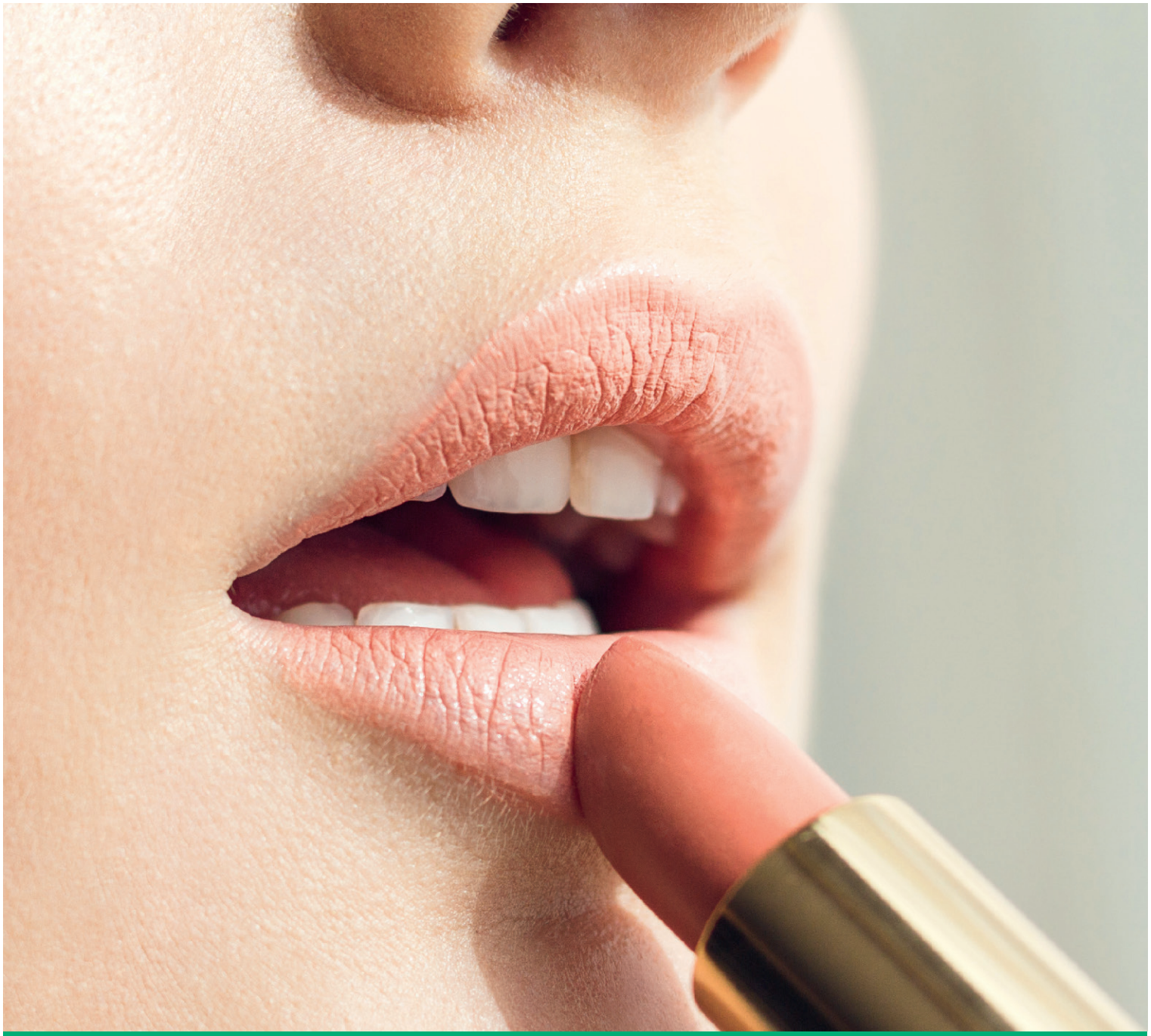
IOI OLEOCHEMICAL

PERSONAL CARE

MIGLYOL® Gels

Stabilising agents
Viscosity regulators

IOI Oleo GmbH



MIGLYOL® Gels

Stabilising agents
Viscosity regulators

Color cosmetics formulators face everyday challenges in creating state-of-the-art products offering consumer-relevant benefits. During and after the application, special demands on the flow properties have to met, while a positive effect on the stability and sensorial profile of the finished product is also required.

With its MIGLYOL® range IOI Oleo offers a variety of oleo gels based on organic modified clays that deliver the right balance between optimal flow properties and high stability of the cosmetic product. These activated, pre-dispersed clays can be directly used in a cosmetics production process without the need to handle clays in powder form.

DATASHEET

MIGLYOL® Gel range:

TRADE NAME	INCI
MIGLYOL® Gel B	Caprylic/Capric Triglyceride, Stearalkonium Hectorite, Propylene Carbonate
MIGLYOL® Gel T	Caprylic/Capric Triglyceride, Stearalkonium Bentonite, Propylene Carbonate
MIGLYOL® Gel 840 B	Propylene Glycol Dicaprylate/ Dicaprate, Stearalkonium Hectorite, Propylene Carbonate

MIGLYOL® Gel B and MIGLYOL® Gel T are based on plant-derived fatty acids and glycerol* caprylic/capric triglyceride, organically modified bentonite and propylene carbonate, which acts as a gelling agent. MIGLYOL® Gel 840 B consists of synthetic propylene glycol dicaprylate/dicaprate, organically-modified bentonite and propylene carbonate as a gelling agent.

* from coconut and palm kernel oil

FORMULATOR BENEFITS:

- Recommended dosage: 5-10%
- Improve stability in the oil phase
- Regulate viscosity and consistency
- Resistant against oxidation

CONSUMER BENEFITS:

- Non-tacky
- No greasy after-feel
- Ease of application and spreadability
- Uniform distribution of pigments on skin

FLOW BEHAVIOUR OF MIGLYOL® Gels:

Stearalkonium hectorite and stearalkonium bentonite have thixotropic flow characteristics, which result in better pigment distribution out of colour sticks during application.
Stearalkonium hectorite gels show higher viscosity and faster rebuild qualities in comparison to stearalkonium bentonite gels.

MIGLYOL® Gels against sedimentation

Left: no MIGLYOL® Gel
Right: 7% MIGLYOL® Gel

t= 0 min

Left: no MIGLYOL® Gel
Right: 7% MIGLYOL® Gel

t = 120 min

The addition of MIGLYOL® Gel B in a shimmering body oil brings clear benefits:

- No clogging of pigments
- No sedimentation of particles
- Homogeneity of dispersed pigments

The results are shown in the pictures on the left. After 2h, the formulation containing MIGLYOL® Gel displays no particle sedimentation.

APPLICATION POSSIBILITIES WITH MIGLYOL® Gel

Stick products and pencils:
- Maintains homogeneity in molten and solidified stages
- Avoids sedimentation
- Increases high-temperature stability
- Eliminates oil separation and bleeding of sticks
- Reduces migration of product on skin and blur around lips and eyes
- Provides one-swipe application

Emulsions:
- Elevates drop-point temperature of W/O emulsions
- Improves emulsion stability
- Enables cold-process emulsification
- Can create a smooth, powdery effect on skin
- Creates unique flow properties:
  - Easy distribution
  - Control of layer thickness for UV-filters

FORMULATIONS:

Cream-to-Powder Shimmer Dust (No.: 830)

PHASE	TRADE NAME	INCI	%
A	**MIGLYOL® Gel B**	Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonate	42.0
B	**MIGLYOL® Coco 810**	Coco caprylate/Caprate	7.0
B	**WITARIX® MCT C8**	Tricaprylin	8.0
B	**SOFTISAN® 100**	Hydrogenated Coco-Glycerides	4.0
B	**IMWITOR® 600**	Polyglyceryl-3 Polyricinoleate	2.0
B	Cetiol® MM	Myristyl Myristate	4.0
C	Tocopherol	Tocopherol	1.0
D	Aqua dem.	Aqua	4.0
D	Timiron® Splendid Red	CI 77891 (Titanium Dioxide), MICA, SILICA	3.0
D	Timiron® Silk Red	Titanium Dioxide (and) Mica (and) Tin Oxide	3.0
D	SanTalc 511	Talc	12.0
D	Rice PO4 Natural	Distarch Phosphate	10.0

Preparation:

1. Heat phase B to approx. 60°C.
2. Add phase C drop by drop to phase B while stirring and continue to stir until an emulsion is formed.
3. Add phase A to phases B/C and homogenise (3 min @ 10.000 rpm).
4. Add phase D one by one and stir until a homogenous paste is obtained.

Suppliers:

IOI Oleo GmbH: IMWITOR®, MIGLYOL®, SOFTISAN®, WITARIX®
BASF: Cetiol®
Merck: Timiron®
SanDream: SanTalc
Agrana: Rice PO4

Shower & Go Bodymilk (No.: 640)

PHASE	TRADE NAME	INCI	%
A	**MIGLYOL® Gel T**	Caprylic/Capric Triglyceride (and) Stearalkonium Bentonite (and) Propylene Carbonate	5.0
A	**MIGLYOL® 829**	Caprylic/Capric/Succinic Triglyceride	3.0
A	Shea Butter	Butyrospermum Parkii (Shea) Butter	1.0
A	**MIGLYOL® OE**	Oleyl Erucate	4.0
A	Sunflower Oil	Helianthus Annuus/ Sunflower Seed Oil	10.0
A	**SOFTISAN® 100**	Hydrogenated Coco-Glycerides	3.0
A	**SOFTISAN® 649**	Bis-Diglyceryl Polyacyladipate-2	2.5
A	**IMWITOR® 600**	Polyglyceryl-3 Polyricinoleate	0.4
A	Carbopol® Ultrez-20	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.2
B	PNC 400	Sodium Carbomer	0.1
B	Glycerine 99.5	Glycerin	4.0
B	Phenonip® XB	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben	0.7
B	Aqua dem.	Aqua	Ad. 100.0
C	Tocopherol	Tocopherol	0.5
C	Colour		q.s.
C	Fragrance	Parfum (EU)/Fragrance (US)	q.s.
D	Sodium Hydroxide 10% in water	Sodium Hydroxide	q.s.

Preparation:

1. Heat phase A up to 60°C and homogenise.
2. Mix phase B and heat up to 60°C.
3. Add phase A to phase B by stirring.
4. Homogenise.
5. Cool with gentle stirring to approx. 30 °C.
6. Stir phase C into the emulsion.
7. Cool to room temperature ‘while gently stirring.
8. Adjust with phase D to a pH value of 6.0.
9. Homogenise for a short time.

Suppliers:

IOI Oleo: IMWITOR®, MIGLYOL®, SOFTISAN®, SOFTIGEN®
Lubrizol: Carbopol®
Neochem: PNC 400
Clariant: Phenonip®

IOI Oleo GmbH

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