

## ABIL® 350

Silicone Oil  
Polydimethylsiloxane

- moisture barrier for skin care or skin protection formulations
- improves application properties
- non-sticky
- good emollient properties
- elimination of "whitening" effect

Personal Care

**INCI (CTFA) Name**

Dimethicone

**Chemical and physical properties  
(not part of specifications)**

Form	liquid
Colour	colourless

**Solubility**  
10 % at 25 °C in

Water	insoluble
Ethanol	insoluble
Mineral oil	dispersible
Isopropyl myristate	soluble
Sunflower seed oil	dispersible
Glycerol	insoluble
1,2-Propylene Glycol	insoluble

**Properties**

The beneficial influence of the ABIL® 350 on the spreadability of cosmetic emulsions is due to its highly hydrophobic character, low interfacial tension and good spreading effect.

It improves the protection of skin care and skin protection preparations against aqueous media.

The defoaming action of ABIL® 350 results also in the reduction of the "whitening" effect which is often found in the application of O/W emulsions.

Properly formulated it leaves no trace of stickiness and gives excellent water repellency.

**Application**

ABIL® 350 is suitable for

- O/W skin care creams and lotions
- W/O skin care emulsions
- protective hand creams and lotions
- wipes formulations
- sun protection products
- aerosol shave lathers
- make-up preparations
- shampoos
- toilet soaps
- antiperspirants

**Preparation**

We recommend adding ABIL® 350 into the oil phase. Further manufacturing conditions correspond to the common principles for the processing of emulsions.

**Recommended usage concentration**

0.5 – 5.0 % ABIL® 350

**Packaging**

200 kg drum

**Hazardous goods classification**

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances,
- protective measures for storage and handling
- measures in case of accidents and fires
- toxicity and ecological effects

is given in our material safety data sheets.

## Guide Line Formulations

<b>Sprayable O/W Lotion Ma 1/02</b>	
<b>Phase A</b>	
TEGINACID® H (Glyceryl Stearate; Ceteth-20)	6.0 %
ABIL® Care 85 (Bis-PEG/PPG-16/16 PEG/PPG 16/16 Dimethicone; Caprylic/Capric Triglyceride)	2.0 %
TEGO® Alkanol 18 (Stearyl Alcohol)	2.0 %
ABIL® 350	0.5 %
TEGOSOFT® CT (Caprylic/Capric Triglyceride)	5.5 %
TEGOSOFT® liquid (Cetearyl Ethylhexanoate)	3.0 %
TEGOSOFT® DO (Decyl Oleate)	5.0 %
Isopropyl Stearate	3.0 %
<b>Phase B</b>	
Glycerin	3.0 %
Water	72.0 %
<b>Phase Z</b>	
Preservative, Parfum	q.s.
<b>Preparation:</b>	
1. Charge with phase B and heat to approx. 70 °C. <sup>1)</sup>	
2. Heat phase A to approx. 70 °C and add to phase B with stirring.	
3. Homogenise.	
4. Cool with gentle stirring.	
<sup>1)</sup> Important information: If phase A has to be charged into the vessel first, phase B must be added to phase A <b>without stirring</b> .	

<b>Quick Breaking W/O Emulsion PW WO 90-0</b>	
<b>Phase A</b>	
ABIL® EM 90 (Cetyl PEG/PPG-10/1 Dimethicone)	0.80 %
ABIL® Wax 9801 (Cetyl Dimethicone)	1.60 %
TEGOSOFT® DEC (Diethylhexyl Carbonate)	2.00 %
ABIL® 350	1.00 %
Cyclomethicone	4.00 %
Magnesium Stearate	0.30 %
<b>Phase B</b>	
Glycerin	10.00 %
Water	79.27 %
Sodium Chloride	1.00 %
Xanthan Gum	0.015 %
TEGO® Carbomer 341 ER (Acrylates / C10-30 Alkyl Acrylate Crosspolymer)	0.015 %
<b>Phase C</b>	
Sodium Hydroxide (10 % in water)	q.s.
<b>Phase Z</b>	
Preservative, Parfum	q.s.
<b>Preparation:</b>	
1. Intensively disperse Magnesium Stearate into oil phase (Ultra-Turrax 25.000 rpm, 1 min.) at room temperature.	
2. Disperse Xanthan Gum and Carbomer in water phase at room temperature and add other ingredients.	
3. Neutralise water phase with Sodium Hydroxide solution.	
4. Add water phase at room temperature slowly into oil phase.*	
5. Homogenise for 2 minutes at 1100 rpm.	
Remarks: Stirrer: MFR	
* Agitation 200 rpm, incorporation time 20 minutes for a 200g batch	

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