

# ABIL® B 8852

## Silicone surfactant for hair and skin cleansing products and shaving products

### Intended use

Hydrophilic emollient

### Benefits at a glance

- refatting properties
- improves the combability of hair
- positive influence on the foam properties in surfactant products

### INCI (PCPC name)

PEG/PPG-4/12 Dimethicone

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

Form	liquid
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### Solubility at 25 °C and 10% concentration in:

Water	dispersible
Ethyl alcohol	soluble
Paraffin oil	dispersible
Isopropyl myristate	soluble
Sunflower seed oil	dispersible
Glycerol	dispersible
1,2-Propyleneglycol	dispersible

Cloud point 4% in water (°C)	<15
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A slight opalescence of the product doesn't restrict its property.

### Properties

ABIL® B 8852 silicone polyether is a non-ionic copolymer produced by linking of long-chain polyether groups with polydimethyl siloxane. In aqueous solutions ABIL® B 8852 behaves like conventional organic non-ionic surfactants: It decreases the surface tension of aqueous solutions, is able to form micelles and shows a characteristic cloud point, when heated, because of its inverse solubility behaviour.

The silicone part causes a remarkable decrease of surface tension.

Due to the silicone part ABIL® B 8852 shows excellent properties in cosmetic applications.

- At elevated processing temperature (> approx. 50 °C) ABIL® B 8852 acts as a foam reducing agent because of its low cloud point.
- At room temperature (approx. 25 °C) ABIL® B 8852 is soluble in clear surfactant formulations and contributes to pleasant and rich foam.

### Application

- shampoos
- shower baths
- face tonics, after shave formulations
- deodorants

Remarkable refatting effect on skin and hair.  
 Wet and dry combability is improved.  
 Well suitable to improve the smoothening effect in face tonics and after shave formulations.  
 The sticky skin feel that is caused by some deodorants can be lowered by using ABIL® B 8852, furthermore it takes more time until the ball of a roll-on-product gets dry.

### 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 accidents and fires
- toxicity and ecological effects

is given in our material safety data sheets.

### Guideline formulations

<b>Clear conditioning shampoo for damaged hair UM 96/31</b>	
Sodium Laureth Sulfate (28%)	25.0%
ABIL® B 8852	0.5%
ABIL® Quat 3272 (Quaternium-80)	0.5%
Water	55.0%
Lauryl Glucoside	4.2%
TEGO® Betain F 50 (Cocamidopropyl Betaine)	14.3%
ANTIL® 171 (PEG-18 Glyceryl Oleate/Cocoate)	0.5%
<b>Preparation:</b>	
Mix the ingredients in the given order.	

<b>Creamy shower gel "2 in 1" C 002/158</b>	
<b>Phase A</b>	
TEGIN® G 1100 (Glycol Distearate)	1.0%
Sodium Laureth Sulfate (28%)	40.0%
<b>Phase B</b>	
TEGO® Betain F 50 (Cocamidopropyl Betaine)	15.0%
Sodium Cocoyl Isethionate (84%)	3.0%
ABIL® B 9950 (Dimethicone Propyl PG-Betaine)	3.0%
ABIL® B 8852	1.0%
Water	37.0%
NaCl, Preservatives	q.s.
<b>Preparation:</b>	
Heat phases A and B up to 75 – 80 °C (above the melting point of TEGIN® G 1100). Add B to A and cool down to room temperature while stirring.	

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