ABIL® B 8851

Silicone surfactant for hair and skin cleansing products and shaving products

- strong decrease of surface tension
- good conditioning properties
- improves the lubricity of shaving products

Personal Care

INCI Name (CTFA name)

PEG/PPG-14/4 Dimethicone

Chemical and physical properties (not part of specifications)	
Form	liquid

Solubility at 25 °C and 10 % concentration in:	
Water	soluble
Ethyl alcohol	soluble
Paraffin oil	dispersible
Isopropyl myristate	insoluble
Sunflower seed oil	dispersible
Glycerol	dispersible
1,2-Propyleneglycol	soluble

Cloud point 4 % in water (°C)	61 - 67

A slight opalescence of the product doesn't restrict its property.

Properties

ABIL® B 8851 silicone polyether is a non-ionic copolymer produced by linking of long-chain polyether groups with polydimethyl siloxane. In aqueous solutions ABIL® B 8851 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 8851 shows excellent properties in cosmetic applications.

Application

Hair care products:

- Provides hair with improved wet combability and pleasant after-feel.

Shaving products:

- Used in shaving foam or soap formulations the positive effect of a better slip can be noticed. The skin gets an aqueous film with increased lubrication properties.

Packaging

210 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.

Guide Line Formulations

Liquid Syndet UM 21/230	
Sodium Laureth Sulfate (28 %)	30.0 %
Perfume	0.5 %
ABIL® B 8851	0.5 %
Water	58.0 %
TEGO® Betain F 50 (Cocamidopropyl Betaine)	6.0 %
ANTIL® 171 (PEG-18 Glyceryl Oleate/Cocoate)	5.0 %
NaCl, Preservatives	q. s.

Preparation:

Mix the ingredients in the given order.

Hair Treatment UM 6/1 B	
Phase A	
TEGINACID® C (Ceteareth-20)	1.00 %
TEGIN® M (Glyceryl Stearate)	2.00 %
TEGO® Alkanol 16 (Cetyl Alcohol)	3.00 %
ABIL® Wax 2440 (Behenoxy Dimethicone)	0.35 %
Phase B	
ABIL® B 8851	0.40 %
ABIL® Quat 3272 (Quaternium-80)	0.50 %
Glycerin	2.00 %
Water	90.75 %
Perfume, Preservatives	q.s.

Preparation:

Heat phases A and B up to 70 °C. Stir B into A and cool down while stirring. Homogenize at 65 °C, add the perfume at 45 °C.
Stir until the emulsion is cool (30 °C).

Shaving Foam UK 108/3	
Phase A	
Water	50.0 %
Monoethanolamine ad pH ≈ 8,6	1.3 %
Coconut Fatty Acid	1.4 %
Myristic Acid	3.5 %
Phase B	
TEGOSOFT® LSE 65 K (Sucrose Cocoate)	2.0 %
Phase C	
TEGO® Betain 810 (Capryl/Capramidopropyl Betaine)	7.6 %
Glycerol	5.0 %
ABIL® B 8851	1.7 %
Perfume	0.3 %
Water	27.2 %
Preservatives	q.s.

Preparation:

A The Fatty Acids are saponificated at 70 °C.
B is added.
C is added after cooling down in the given order.

This formulation can be applied by using an airspray foamer or a fingerpump foamer (e. g. of Airspray International/Netherlands).

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