

ANTIL[®] 141 liquid

Thickening agent for shampoos, shower gels, etc.

- solubilizing
- cold processable
- good dermatologic compatibility
- good thickening properties in common surfactant systems

Personal Care

INCI Name (CTFA Name)

Propylene Glycol;
PEG-55 Propylene Glycol Oleate

Chemical and physical properties (not part of specifications)

Form	liquid, low-viscous
Appearance	clear to slightly turbid

Solubility at 25 °C and 10 % concentration in

Ethanol	soluble
1,2-Propylene glycol	soluble
Vegetable oil	insoluble
Mineral oil	insoluble
Water	dispersible

Properties

ANTIL® 141 liquid shows good dermatologic compatibility and was especially developed for particularly mild formulations based on anionic/TEGO® Betain mixes.

In addition to the thickening effect, ANTIL® 141 liquid is a moderate solubilizer. By increasing the solubilizing effect of the surface active substances it may contribute to give clear solutions with higher amounts of perfume oils or essential oils.

Application

ANTIL® 141 liquid is used as a thickening agent for aqueous solutions of surfactants such as shampoos, foam baths, shower preparations and liquid soaps. It is compatible with all standard anionic, cationic amphoteric and non-ionic surfactants. ANTIL® 141 liquid may be used in a pH range of pH 5 up to pH 8, the usual pH for skin cleansing products.

Preparation

ANTIL® 141 liquid has been developed for cold processing.

The product is mixed at room temperature with commercial aqueous anionics and water-insoluble ingredients such as essential oils, perfumes or lipoid refatting agents. This mixture is diluted with water to the desired concentration of active matter.

If the formulation has a high content of surfactant, it is also possible to add ANTIL® 141 liquid after mixing all other ingredients. At low concentrations of surfactant the latter method of processing is only possible, if the production facilities are equipped with sufficient stirrers and homogenizers. In this case, ANTIL® 141 liquid tends to form gel particles which are difficult to dissolve.

The thickening effect of ANTIL® 141 liquid rises continually with its usage level – without passing a maximum – and with the content of surface active matter in the formulation.

An overproportional increase of viscosity is obtained, if ANTIL® 141 liquid is combined with small amounts of electrolytes such as sodium chloride or ammonium chloride.

Whereas surfactant systems thickened only with sodium chloride often are shear thinning, those systems thickened with ANTIL® 141 liquid are nearly ideal viscous.

Packaging

800 kg pallet (4 x 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.

Guide Line Formulations

Antidandruff Shampoo	
ANTIL® 141 liquid	2.0 %
Perfume	q.s.
Sodium Laureth Sulfate (28 %)	30.0 %
Water	ad 100 %
Pyrion-Disulfid, WeylChem	0.5 %
TEGO® Betain F 50 (Cocamidopropyl Betaine)	10.0 %
Preservative, Colour	q.s.
Preparation: Mix the ingredients in the given order.	

Creamy 2in1 Body Wash EA-113	
Phase A	
TEGIN® BL 315 (Glycol Distearate)	2.5 %
Myristic Acid	4.0 %
Jojoba (Buxus Chinensis) Oil	5.0 %
Sodium Laureth Sulfate, 28%	45.0 %
Water	10.0 %
Phase B	
Water	19.0 %
TEGOSOFT® GC (PEG-7 Glyceryl Cocoate)	2.0 %
Phase C	
ANTIL® 141 liquid	2.5 %
Preservative, Perfume	q.s.
Phase D	
TEGO® Betain F 50 (Cocamidopropyl Betaine)	10.0 %
Preparation: 1. Heat A to approx. 70°C while mixing (above the melting point of the TEGIN BL 315) 2. Heat the ingredients of B to 70°C. 3. Stir B into A. Cool to 40°C. 4. Add C. Mix well. Avoid air entrapment. 5. Add D while stirring. Avoid air entrapment.	

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