

TEGO® Alkanol L 4

Non-ionic surfactant

- Solubilizer for perfume and oils
- Good emulsifying properties
- Good thickening effect in surfactant formulations
- Low foaming

Personal Care

INCI name (CTFA name)

Laureth-4

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

Form	liquid
HLB value	app. 10

Properties

TEGO® Alkanol L 4 is a non-ionic surfactant. It has good emulsifying and solubilizing properties.

In surfactant systems it functions as a thickening agent.

Application

TEGO® Alkanol L 4 is used in

- shampoos
- body cleansing formulations
- styling products
- skin care preparations
- decorative cosmetics
- deodorants

Packaging

800 kg pallet (4 x 200 kg drums)

Storage

TEGO® Alkanol L 4 tends to cloudiness and crystallization after storage time. This is reversible and has no negative influence on the quality. Short stirring and heating (35–40°C) will provide adequate homogenization.

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**Deodorant Pump Spray
Ze 1/95**

TEGODEO® CW 90 (Zinc Ricinoleate; Tetrahydroxypropyl Ethylenediamine; Laureth-3; Propylene Glycol)	2.0 %
TEGO® Alkanol L 4	6.0 %
Dipropylene Glycol	4.0 %
Perfume	0.9 %
SD Alcohol 39 C	32.0 %
Tetrahydroxypropyl Ethylenediamine	0.5 %
Water	54.2 %
Citric Acid (50 % in water)	0.4 %

Preparation:

Add the raw materials in the given order while stirring. Adjust the pH value with citric acid to 5.5.

**Deodorant Roll on
Ze 2/95****Phase A**

TEGO® Carbomer 140 (Carbomer)	1.0 %
Water	55.5 %
SD Alcohol 39 C	32.0 %

Phase B

TEGODEO® CW 90 (Zinc Ricinoleate; Tetrahydroxypropyl Ethylenediamine ; Laureth-3; Propylene Glycol)	2.0 %
TEGO® Alkanol L 4	4.0 %
Dipropylene Glycol	2.0 %
Triethanolamine	2.5 %

Phase C

Citric Acid (50 % in water)	1.0 %
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Preparation:

Disperse TEGO® Carbomer 140 by stirring in cold water. Add ethanol while stirring and afterwards B. Adjust the pH value with C.

Sun Protecting Ringing Gel Wax with Mica AK 66/3	
Phase A	
Water	47.95 %
Propylene Glycol	2.00 %
Glycerol	11.00 %
ABIL® Soft AF 100 (Methoxy PEG/PPG-7/3 Aminopropyl Dimethicone)	0.50 %
Phase B	
TEGO® Alkanol IC 20 (Isoceteth-20)	14.50 %
ABIL® UV Quat 50 (Polysilicone-19)	2.00 %
TEGO® Alkanol L 4	10.00 %
Paraffinum Perliquidum	6.00 %
TEGOSOFT® TN (C12-15 Alkyl Benzoate)	6.00 %
Titanium Dioxide, Mica, Silica (Timiron Splendid Gold, Merck)	0.05 %
Phase Z	
Perfume	q.s.
Preparation:	
Heat phases A and B separately to 90 °C. Stir B into A and cool down while stirring. Add the perfume below 55 °C. Fill into (glass) jars at 50 – 55 °C.	

2 Phase Oil Bath FM 10262	
Phase A	
Olive (Olea Europaea) oil	7.0 %
TEGOSOFT® TN (C12-15 Alkyl Benzoate)	20.0 %
Phase B	
Sodium Laureth Sulfate, 28 %	40.0 %
TEGO® Alkanol L 4	2.0 %
Water	21.0 %
REWOTERIC® AM 2 C NM (Disodium Cocoamphodiacetate)	10.0 %
Preservative	q.s.
Preparation:	
Blend phase A and B separately. Then mix phase B in phase A and adjust the pH value to approximately 6. Finally add preservatives as required.	
Remarks:	
2 Phases: the phase on top looks like a white emulsion, the other phase is clear and yellow.	

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