TEGO® Carbomer 134
TEGO® Carbomer 140
TEGO® Carbomer 141

Emulsion stabilizers, viscosity adjusters and viscosity builders

- Especially suitable for cosmetic or pharmaceutical emulsions and gels
- TEGO® Carbomer products correspond to the quality requirements according to Pharmacopoe Européenne

Personal Care

INCI name (CTFA name)

Carbomer

TEGO® Carbomer products correspond to the quality requirements according to Pharmacopoe Européenne.

Chemical and physical properties (not part of the specification)	TEGO® Carbomer 134	TEGO® Carbomer 140	TEGO® Carbomer 141
Appearance	powder	powder	powder

Properties

- TEGO® Carbomer products are excellent emulsion stabilizers, viscosity adjusters and viscosity builders.
- n-Hexane is used as solvent in the polymerization step.
- TEGO® Carbomer products are soluble in both water and alcohol.
- TEGO® Carbomer products can be used over a wide pH range.

Application

- TEGO® Carbomer products are suitable for the preparation and stabilization of creams, lotions and suspensions.
- TEGO® Carbomer 141 is suitable for the preparation of low viscous formulations, especially for O/W lotions.
  Additionally the electrolyte compatibility TEGO® Carbomer 141 is relatively high.
- TEGO® Carbomer 140 is especially suitable for the preparation of clear water or alcohol based gels.
- TEGO® Carbomer 134 and TEGO® Carbomer 140 are recommended for the manufacturing of high viscous emulsions.
- TEGO® Carbomer 134 is especially suitable for O/W creams.

Preparation

Add TEGO® Carbomer slowly into the Vortex of the agitating liquid. Avoid agglomeration. Use dissolver or propeller stirrer or rotor-stator-homogenizer.

Intensive shear may lead to a viscosity reduction of the final product and should be avoided.

Neutralise with triethanolamine, tetrahydroxypropylethylendiamine, sodium hydroxide or inorganic bases.

TEGO® Carbomer products can also be dispersed directly into mineral oil or ester oils just before manufacturing.

Recommended usage concentration

0.05 - 1.00 % TEGO® Carbomer

Packaging

270 kg pallet (18 x 15 kg box)

Storage

TEGO® Carbomer products are hygroscopic.
The material should be stored dry and in the dark.
Open boxes should be used immediately.

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

O/W Lotion JM 2/94	
Phase A	
TEGO® Care 215 (Ceteareth-15,Glyceryl Stearate)	2.5 %
TEGO® Alkanol 18 (Stearyl Alcohol)	2.0 %
TEGOSOFT® OS (Ethylhexyl Stearate)	5.0 %
Mineral Oil (30 mPas)	4.2 %
ABIL® 350 (Dimethicone)	0.5 %
Phase B	
Glycerin	3.0 %
Water	81.5 %
Phase C	
TEGO® Carbomer 141	0.2 %
Mineral Oil (30 mPas)	0.8 %
Phase D	
Sodium Hydroxide (10 % in water)	0.3 %
Preservative, Parfum	q.s.

Preparation:

1. Charge with phase B and heat to approx. 80 °C.*
2. Heat phase A to approx. 80 °C and add to phase B with stirring.
3. Homogenise.
4. Cool with gentle stirring, add phase C at approx. 60 °C and homogenise again.
5. Add phase D at approx. 40 °C.

*Important informaiton:
If it is charged with phase A, phase B must be added to phase A **without stirring**.

O/W Cream with Avocado Oil F 63/96	
Phase A	
TEGO® Care 450 (Polyglyceryl-3 Methylglucose Distearate)	3.0 %
TEGIN® M Pellets (Glyceryl Stearate)	0.7 %
TEGO® Alkanol 18 (Stearyl Alcohol)	0.3 %
Avocado Oil	12.0 %
TEGOSOFT® CT (Caprylic/Capric Triglyceride)	8.2 %
Phase B	
Glycerin	3.0 %
Water	71.3 %
Phase C	
TEGO® Carbomer 134	0.2 %
TEGOSOFT® DO (Decyl Oleate)	0.8 %
Phase D	
Sodium Hydroxide (10 % in water)	0.5 %
Preservative, Parfum	q.s.

Preparation:

1. Charge with phase B and heat to approx. 80 °C.*
2. Heat phase A to approx. 80 °C and add to phase B with stirring.
3. Homogenise.
4. Cool with gentle stirring, add phase C at approx. 60 °C and homogenise again.
5. Add phase D at approx. 40 °C.

*Important informaiton:
If it is charged with phase A, phase B must be added to phase A **without stirring**.

Facial Cleanser **UM 216/15**	
Phase A	
Sodium Laureth Sulfate	4.3 %
Parfum	0.2 %
TEGOSOFT® GC (PEG-7 Glyceryl Cocoate)	0.5 %
Glycerin	30.0 %
TEGO® Carbomer 140 (4 % in water)	27.0 %
Water	29.0 %
TEGO® Betain 810 (Capryl/Capramidopropyl Betaine)	3.2 %
LACTIL® (Sodium Lactate, Sodium PCA, Glycine, Fructose, Urea, Niacinamide, Inositol, Sodium Benzoate, Lactic Acid)	1.0 %
Xanthan Gum	0.1 %
Sodium Hydroxide (10 % in water)	4.7 %
Preservative	q.s.
Preparation: Mix the ingredients in the given order.	

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