

TEGOSOFT® GC / TEGOSOFT® GMC 6

Hydrophilic emollients for shampoos, shower and bath preparations

Intended use

TEGOSOFT® GC Hydrophilic emollient & Solubilizer
 TEGOSOFT® GMC 6 Hydrophilic emollient

Benefits at a glance

- improve skin feel
- clearly soluble in aqueous surfactant solutions
- solubilize oils and oil-soluble ingredients

INCI (PCPC Name)

TEGOSOFT® GC PEG-7 Glyceryl Cocoate
 TEGOSOFT® GMC 6 PEG-6 Caprylic/Capric Glycerides

| Chemical and physical properties (not part of specifications) | TEGOSOFT® GC | TEGOSOFT® GMC 6 |
|--|--------------|-----------------|
| Form | liquid | liquid |

| Solubility at 25 °C at 10% concentration | TEGOSOFT® GC | TEGOSOFT® GMC 6 |
|--|-------------------------------|-------------------------------|
| Water | soluble (slight turbidity) | soluble |
| Cosmetic alcohol | soluble | soluble |
| Paraffin oil (app. 20 mPas) | insoluble | insoluble |
| Isopropylmyristate | insoluble | insoluble |
| Sunflower seed oil | dispersible | soluble (slight turbidity) |
| Glycerol | insoluble | dispersible |
| 1,2-Propylene glycol | dispersible | soluble |

TEGOSOFT® GC fulfils the requirements of Pharmacopoe Européenne.

Properties

TEGOSOFT® GC and TEGOSOFT® GMC 6

- are clearly soluble in aqueous surfactant solutions
- act as a superfatting agent to hair and skin
- solubilize oils and oil-soluble ingredients (e.g. menthol, salicylic acid and its derivatives, camphor)
- are stable in medium pH range (app. 5 to 8)
- result in surfactant preparations with good foam quality.

Application

TEGOSOFT® GC and TEGOSOFT® GMC 6 are used as a

- superfatting agent in shampoos, shower and bath preparations
- solubilizer in skin cleansing preparations, bath oils, facial cleansers and hair rinses

Recommended usage concentration

2 – 7% TEGOSOFT® GC resp.

TEGOSOFT® GMC 6

Packaging

880 kg pallet (4 x 220 kg drum)

Storage

Store in sealed containers at room temperature and protect from humidity. Turbidity occurring at low temperature is reversible and can be simply removed by warming the product.

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.

Guideline formulations

| Mild Babyshampoo, slightly conditioning KA 052666 | |
|---|--------|
| REWOTERIC® AM C (Sodium Cocoamphoacetate) | 10.00% |
| REWOPOL® SB CS 50 B (Disodium PEG-5 Laurylcitrate Sulfosuccinate; Sodium Laureth Sulfate) | 5.00% |
| REWOPOL® SB FA 30 B (Disodium Laureth Sulfosuccinate) | 10.00% |
| REWODERM® LI S 80 (PEG-200 Hydrogenated Glyceryl Palmate; PEG-7 Glyceryl Cocoate) | 4.00% |
| TEGOSOFT® GC (PEG-7 Glyceryl Cocoate) | 0.50% |
| REWOMID® IPP 240 (Cocamide MIPA) | 0.50% |
| VARISOFT® PATC (Palmitamidopropyltrimonium Chloride) | 2.50% |
| Water | 67.50% |
| Citric Acid Monohydrate | q.s. |
| Preservative | q.s. |
| Preparation: Homogenize the ingredients in the given order at approximately 50 °C and stir. Adjust the pH value to approximately 5.5 with Citric Acid and the desired viscosity with Sodium Chloride. Finally add preservative as required. | |

| Mild Shower Gel ST-SB 3 | |
|---|--------|
| Sodium Laureth Sulfate (28%) | 37.00% |
| TEGOSOFT® GC | 1.50% |
| Water | 42.50% |
| REWOTERIC® AM C (Sodium Cocoamphoacetate) | 9.00% |
| TEGO® Betain 810 (Capryl/Capramidopropyl Betaine) | 5.00% |
| LACTIL® (Sodium Lactate; Sodium PCA; Glycine; Fructose; Urea; Niacinamide; Inositol; Sodium Benzoate; Lactic Acid) | 1.00% |
| Citric Acid, 30% | 1.30% |
| REWODERM® LI S 80 (PEG-200 Hydrogenated Glyceryl Palmitate; PEG-7 Glyceryl Cocoate) | 2.00% |
| NaCl | ~ 0.2% |
| Preservatives | q.s. |
| Preparation: Mix the ingredients in the given order. | |

| Shower Gel KA 05256 | |
|--|-------|
| Sodium Laureth Sulfate (28%) | 34.0% |
| Water | 49.5% |
| TEGO® Betain F (Cocamidopropyl Betaine) | 9.0% |
| REWOTERIC® AM C (Sodium Cocoamphoacetate) | 4.0% |
| ANTIL® 200 (PEG-200 Hydrogenated Glyceryl Palmitate; PEG-7 Glyceryl Cocoate) | 1.0% |
| TEGOSOFT® GMC 6 | 1.6% |
| Sodium Chloride, Preservative | q.s. |
| Preparation: Mix the ingredients in the given order. | |

| Humectant Facial Cleansing Gel UM 216/15 | |
|---|--------|
| Phase A | |
| Sodium Laureth Sulfate, 28% | 4.30% |
| Perfume | 0.20% |
| TEGOSOFT® GC (PEG-7 Glyceryl Cocoate) | 0.50% |
| Glycerin | 30.00% |
| LACTIL® (Sodium Lactate; Sodium PCA; Glycine; Fructose; Urea; Niacinamide; Inositol; Sodium Benzoate; Lactic Acid) | 1.00% |
| TEGO® Betain 810 (Capryl/Capramidopropyl Betaine) | 3.20% |
| Phase B | |
| Xanthan Gum (Keltrol F, CP Kelco) | 0.10% |
| TEGO® Carbomer 140 (Carbomer) | 1.08% |
| Water | 54.92% |
| Phase C | |
| NaOH, 10% | 4.70% |
| Preservative | q.s. |
| Preparation: A: Mix the ingredients in the given order. B: Dissolve the TEGO® Carbomer and the Xanthan Gum in the water. Add phase B to phase A homogeneously and then adjust the pH value with NaOH. | |

| Facial Cleansing Foam with Phytosphingosine SG 896/15 | |
|--|--------|
| TEGOSOFT® PC 41 (Polyglyceryl-4-Caprato) | 1.00% |
| Phytosingosine Hydrochloride (Phytosingosine HCl) | 0.05% |
| Perfume | 0.20% |
| TEGOSOFT® GC | 3.00% |
| Glycerin | 10.00% |
| REWOTERIC® AM C (Sodium Cocoamphoacetate) | 3.00% |
| REWODERM® S 1333 (Disodium Ricinoleamido MEA- Sulfosuccintae) | 5.00% |
| Water | 77.95% |
| Preservatives | q.s. |
| <p>Preparation:</p> <p>Solubilize the Phytosingosine in the TEGOSOFT® PC 41, heat up to 80 °C and mix homogeneously. Cool down to 40 °C and add the other ingredients in the given order. Adjust the pH value to approximately 5.5.</p> <p>For application with "Pump foamer" (e.g. of Airspray).</p> | |

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The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used. (Status: April, 2008)

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Product specification

Material TEGOSOFT GMC 6
Spec.Code K00 STANDARD

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 Fax: +49 (201) 173-1828
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personal-care@evonik.com

| Inspection Characteristics | Method | Limits | Units | Z |
|----------------------------|------------|-------------|----------|---|
| Dioxane | GM_0616_01 | <=5 | ppm | X |
| Ethylenoxide | GM_0616_01 | <=1 | ppm | X |
| Colour to Hazen | GM_0140_01 | <= 100 | Haze | X |
| Hydroxyl value | GM_0020_01 | 200.0-220.0 | mg KOH/g | X |
| Iodine value | GM_0050_01 | <=1.00 | g I/100g | C |
| Acid Value | GM_0010_01 | <=2.00 | mg KOH/g | X |
| Saponification Value | GM_0030_01 | 85.0-105.0 | mg KOH/g | X |
| Water Content | GM_0080_01 | <=0.50 | % | X |

Report on inspection certificate: X = specific/actual value, C = unspecific value/conformity, T = not reported

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All warranty claims in respect of the conformity of our product are subject to our General Terms and Conditions of Sale and Delivery. The data listed above reflects the criteria for our internal quality tests. We do not hereby make any express or implied warranty, whether for specific properties or for fitness for any particular application or purpose. All values are valid for the product when despatched from the works.

The Standard Test Methods can be obtained from specialized publishers. Evonik's test methods are available on request.

| | | | |
|--------------------------|------------------------|-------------------------|---------------|
| Material: TEGOSOFT GMC 6 | | Spec-Code: K00 STANDARD | Page 1 from 1 |
| Print date: 06.07.2015 | Valid from: 18.03.2009 | Version: 8 | |

TEGOSOFT® GMC 6

Product data record

1. General information

1.1 Manufacturer/Supplier

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1.2 Product Description

1.2.1 Raw material category hydrophilic emollient, solubilizer

1.2.2 Ingredients according to INCI

PEG-6 Caprylic/Capric Glycerides

1.2.3 Composition

| Components | Source | Ratio |
|----------------------------------|----------------------|-------|
| PEG-6 Caprylic/Capric Glycerides | vegetable /synthetic | 100 % |

This composition information serves for information of our customers only. It is neither relevant for the composition listing according to Regulation (EC) No 1223/2009, nor does it reflect the chemical composition according to the different chemical regulations in the world which is disclosed in the table "information on ingredients/hazardous components" in the relevant parts of the respective (Material) Safety Data Sheets.

1.2.4 Solvents, preservatives and other additives

| | CAS No. | EINECS / EC No. | content | Function |
|--------------|---------|-----------------|---------|----------|
| no additives | | | | |

No components which are listed in Annex II of the Regulation (EC) No 1223/2009 and its modifications and updates are added to and are not to be expected in the above mentioned product due to the raw materials used and the production process.

2. Information on production process

General description of production process:
Ethoxylated esterification product

The product is not irradiated.

TEGOSOFT® GMC 6 is produced in the strictest absence of any animal derived material of any type.

Origin of vegetable starting material: palm kernel oil, rapeseed oil

GMO-Status:

The item contains ingredients derived from rapeseed (including oils and other refined ingredients), but these ingredients are sourced from an "Identity Preserved" programme and can be certified NON-GM.

However max 0.9 % cross-contamination is possible. Any protein or DNA is not present. Consequently the product will be PCR negative when tested.

2.1 By products

| | | method |
|--------------------------------|--|----------------|
| Residual solvents | not applicable | |
| Free amines | not applicable | Chromatography |
| Nitrosamines | not applicable | |
| Monochloroacetic acid | not applicable | Chromatography |
| Dichloroacetic acid | not applicable | Chromatography |
| 1,4-Dioxane | max. 5 ppm | |
| Diethylene glycol | max. 0.15 % | |
| Pesticides | meets the valid regulatory requirements for limits on agricultural pesticides | |
| Total heavy metals | max. 20 ppm | AAS-ICP |
| As, Cd, Co, Cr, Hg, Ni, Pb, Sb | Each < 1 ppm | AAS-ICP |
| Latex | not to be expected in the product due to the raw materials used and the production process | |
| VOC | < 3 % according to SR (Swiss Right) 814.018 | |

2.2 CMR (Carcinogenic, Mutagenic or Reprotoxic)

The use in cosmetic products of substances classified as CMR substances, of category 1A or 1B or 2 under Part 3 of Annex VI to Regulation (EC) No 1272/2008 shall be prohibited.

Further Information:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:342:0059:0209:en:PDF>

Some of the CMR substances mentioned below and listed in Annex VI to Regulation (EC) No 1272/2008 are used as starting materials or solvents for the production of our cosmetic raw materials and may require reporting under California Proposition 65 or the Safe Cosmetics Act, SB 484.

The presence of these prohibited substances has to be seen as non-intended. It is stemming from impurities of the starting materials or the manufacturing process which is technically unavoidable in good manufacturing practice.

| CMR substance | Starting material | max. concentration | method |
|-----------------------------------|-------------------|--------------------|--------|
| Ethylene Oxide | yes | 1 ppm | |
| Propylene Oxide | no | | |
| Octamethylcyclotetrasiloxane (D4) | no | | |
| 2-Ethylhexanoic Acid | no | | |
| n-Hexane | no | | |
| Methyl Chloride | no | | |
| Dimethyl Sulphate | no | | |

2.3 "Allergens" according to the Regulation (EC) No 1223/2009

The presence of substances, the mentioning of which is required under the column 'Other' in Annex III, shall be indicated in the list of ingredients in addition to the terms parfum or aroma.

The cosmetic raw materials and the cosmetic actives supplied by Evonik Personal Care are manufactured without the use of perfumes and fragrances. An analytical proof for the absence in traces of the substances to be mentioned in addition to the terms parfum or aroma is not performed in cosmetic raw materials, which are chemically produced.

None of these substances have been intentionally added to our cosmetic raw materials or are formed during the manufacturing process according to our knowledge of the chemistry.

2.4 Food Ingredients listed in Annex IIIa of Commission Directive 2007/68/EC.

None of these substances have been intentionally added to our cosmetic raw materials or are formed during the manufacturing process according to our knowledge of the chemistry.

3. Microbiological status

Total Viable Count max. 100 cfu/g
Pathogens* absent/g

*Pathogens are: Enterobacteria, Pseudomonas, Enterococci, Candida albicans, Staphylococci

4. Shelf life / storage conditions

24 months after production (unopened original packaging)

5. Regulatory Status

5.1 Customs tariff number 34021300

5.2 Regulatory status (chemical regulations)

Europe

| Components | REACH status | CAS No. | EINECS / EC No. |
|----------------------------------|--------------|-------------|-----------------|
| PEG-6 Caprylic/Capric Glycerides | Polymer | 127281-18-9 | Polymer |
| | Polymer | 308067-11-0 | Polymer |

Other countries

| Country | | yes / no | Remark |
|-----------|---------------|----------|--|
| Australia | AICS: | yes | CAS No. 127281-18-9 |
| China | IECSC: | yes | CAS No. 127281-18-9 |
| Canada | DSL: NDSL: | no | CAS Nos. 127281-18-9 and 308067-11-0 are on the revised ICL list |
| Taiwan | TCSI: | yes | CAS No. 127281-18-9 |

In the following countries the relevant authorities currently do not require pre-market approval for cosmetic raw materials:

Brazil, Japan, South Korea, Philippines, USA

5.2.1 Regulatory status (cosmetic regulation)

| Country | | yes / no | Remark |
|---------|-------|----------|--|
| China | CFDA: | yes | |
| Japan | JSQI: | yes | JSQI No. 523209, but specifications not controlled |

6. Toxicology and Ecotoxicology

Refer to summary of ecotoxicological and toxicological data