

# TEGOSOFT® CR

Cosmetic wax ester which gives a silky, but non-oily skin feel

## Intended use

Waxy lipophilic emollient

## Benefits at a glance

- Especially suitable for skin care products
- Solid lipophilic emollient
- Melts at skin temperature
- Based on vegetable raw materials
- Low cetyl alcohol content, therefore especially suitable for liquid O/W lotions
- Unbleached

## INCI (PCPC name)

Cetyl Ricinoleate

## Chemical and physical properties

(not part of specifications)

Form	waxy
Color	colorless to slightly yellow

## Further product information

(not part of specifications)

Melting point (°C)	approx. 27
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Viscosity according to Höppler (mPas) at	
30 °C	approx. 47
40 °C	approx. 36
50 °C	approx. 20

## Properties

- Gives a silky, but non-oily feel on the skin.
- Cosmetic wax ester which melts at skin temperature.
- Has a low cetyl alcohol content (< 5%). Therefore an undesirable increase of viscosity in O/W emulsions is avoided by using this product.
- Non-comedogenic.

## Application

TEGOSOFT® CR is suitable for

- O/W Body creams and lotions
- Products for dry skin
- Products for sensitive skin
- Liquid make-ups and lipsticks

## Recommended usage concentration

2 – 5% TEGOSOFT® CR

## Storage/Handling

TEGOSOFT® CR tends to separate after storage time. This is reversible and has no negative influence on the quality. Short heating (30 °C) and stirring will provide adequate homogenization.

## Packaging

720 kg pallet (4 x 180 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 case of accidents and fires
- toxicity and ecological effects

is given in our material safety data sheets.

## Guideline formulations

<b>O/W Body Cream</b>	
<b>F 4/99</b>	
<b>Phase A</b>	
TEGO® Care 450 (Polyglyceryl-3 Methylglucose Distearate)	3.0%
TEGIN® M Pellets (Glyceryl Stearate)	1.5%
TEGO® Alkanol 18 (Stearyl Alcohol)	0.5%
Mineral Oil (30 mPas)	7.0%
TEGOSOFT® OS (Ethylhexyl Stearate)	8.0%
TEGOSOFT® CR	5.0%
<b>Phase B</b>	
Glycerin	3.0%
Water	72.0%
Preservative, Perfume	q.s.
<b>Preparation:</b>	
1. Charge with phase B and heat to approx. 70 °C <sup>1)</sup>	
2. Heat phase A to approx. 70 °C and add to phase B with stirring	
3. Homogenize	
4. Cool with gentle stirring	
<sup>1)</sup> Important information: If it is charged with phase A, phase B must be added to phase A <b>without stirring.</b>	

<b>Natural O/W Body Butter</b>	
<b>H 18/07-50</b>	
<b>Phase A</b>	
TEGO® Care 450 (Polyglyceryl-3 Methylglucose Distearate)	3.0%
TEGOSOFT® CT (Caprylic/Capric Triglyceride)	4.0%
TEGOSOFT® TIS (Triisostearin)	4.0%
TEGO® Alkanol 1618 (Cetearyl Alcohol)	5.0%
TEGIN® M Pellets (Glyceryl Stearate)	3.0%
TEGOSOFT® CR (Cetyl Ricinoleate)	3.0%
TEGOSOFT® MM (Myristyl Myristate)	1.0%
Butyrospermum Parkii (Shea butter)	3.0%
Persea Gratissima (Avocado) Oil	1.5%
Prunus Amygdalus Dulcis (Sweet Almond) Oil	1.5%
Tocopheryl Acetate	1.0%
<b>Phase B</b>	
Water	64.0%
Glycerin	5.0%
<b>Phase C</b>	
Sodium Hydroxide (10% in water)	0.2%
<b>Phase D</b>	
Benzyl Alcohol; Glycerin; Benzoic Acid, Sorbic Acid (Rokonsal BSB-N, Ashland)	0.8%
<b>Phase Z</b>	
Perfume	q.s.

**Preparation:**

1. Heat phase A and phase B separately to approx. 75 °C.
2. Add phase A to phase B with stirring.<sup>1</sup>
3. Homogenize.
4. Cool with gentle stirring below 40 °C.
5. Add phase C and stir well.
6. Add phase D and adjust the pH 5.0 – 5.5.

<sup>1</sup>Important: If phase A has to be charged into the vessel first, phase B must be added without stirring.

<b>O/W After Shave Cream for Men F 35/01-10</b>	
<b>Phase A</b>	
AXOL® C 62 Pellets (Glyceryl Stearate Citrate)	1.5%
TEGIN® M Pellets (Glyceryl Stearate)	2.0%
TEGO® Alkanol 1618 (Cetearyl Alcohol)	3.0%
TEGOSOFT® TN (C12-15 Alkyl Benzoate)	3.5%
TEGOSOFT® CR (Cetyl Ricinoleate)	2.0%
TEGOSOFT® TIS (Triisostearin)	1.0%
TEGOSOFT® MM (Myristyl Myristate)	0. %
Cyclomethicone	4.0%
Macadamia Ternifolia Seed Oil	2.0%
Tocopheryl Acetate	0.5%
<b>Phase B</b>	
Glycerin	4.0%
Panthenol	0.5%
Allantoin	0.2%
Water	66.3%
<b>Phase C</b>	
TEGO® Carbomer 134 (Carbomer)	0.3%
TEGOSOFT® TN (C12-15 Alkyl Benzoate)	1.2%
<b>Phase D</b>	
Bisabolol	0.5%
<b>Phase E</b>	
Sodium Hydroxide (10% in water)	q.s.
<b>Phase F</b>	
Alcohol	7.0%
<b>Phase Z</b>	
Preservative, Perfume	q.s.

#### **Preparation:**

1. Heat phase A and phase B separately to approx. 80 °C.
2. Add phase A to phase B with stirring.<sup>1</sup>
3. Homogenize.
4. Cool with gentle stirring to approx. 60 °C and add phases C and D.
5. Homogenize for a short time.
6. Cool with gentle stirring and add phases E and F below 40 °C.

<sup>1</sup>Important: If phase A has to be charged into the vessel fist, phase B must be added without stirring.

<b>O/W Energizing Cream Gel</b>	
<b>H 13/09-1</b>	
<b>Phase A</b>	
ABIL® Care XL 80 (Bis-PEG/PPG-20/5 PEG/PPG-20/5 Dimethicone; Methoxy PEG/PPG-25/4 Dimethicone; Caprylic/Capric Tri- glyceride)	3.0%
ABIL® EM 97 S (Bis PEG/PPG-14/14 Dimethicone; Dimethicone)	1.0%
ABIL® 350 (Dimethicone)	1.0%
Dimethicone (5 mPas)	9.0%
TEGOSOFT® CR (Cetyl Ricinoleate)	3.0%
Xanthan Gum	0.2%
TEGO® Carbomer 341 ER (Acrylates/C10-30 Alkyl Acrylate Crosspolymer)	0.4%
TEGOSOFT® CT (Caprylic/Capric Triglyceride)	4.0%
<b>Phase B</b>	
Water	72.9%
TEGO® Cosmo C 100 (Creatine)	0.5%
<b>Phase C</b>	
Alcohol	5.0%
Sodium Hydroxide (10% in water)	q.s.
<b>Phase Z</b>	
Preservative, Perfume	q.s.

**Preparation:**

1. Heat phase A to approx. 30 °C.
2. Add phase A to phase B with stirring.<sup>1</sup>
3. Homogenize.
4. Add phase C and homogenize for a short time.

<sup>1</sup>Important: If phase A has to be charged into the vessel first, phase B must be added without stirring.

C 04/13

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## Product specification

**Material** TEGOSOFT CR  
**Spec.Code** K00 STANDARD

### Evonik Nutrition & Care GmbH

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Inspection Characteristics	Method	Limits	Units	Z
Colour to Hazen	GM_0140_01	<=200	Haze	X
free Fatty Alcohol	GM_0220_02	<=5.0	%	X
Hydroxyl value	GM_0020_01	90.0-105.0	mg KOH/g	X
Iodine value	GM_0050_01	42.00-57.00	g I/100g	X
Acid Value	GM_0010_01	<= 1.00	mg KOH/g	X
Melting Point	GM_0150_01	25.0-30.0	°C	X
Saponification Value	GM_0030_01	100.0-115.0	mg KOH/g	X

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

This document is computer printed and therefore valid without signature.

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.

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Print date: 06.07.2015	Valid from: 25.05.1999	Version: 0	

# TEGOSOFT® CR

## Product data record

### 1. General information

#### 1.1 Manufacturer/Supplier

Evonik Nutrition & Care GmbH  
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#### 1.2 Product Description

1.2.1 Raw material category waxy lipophilic emollient

#### 1.2.2 Ingredients according to INCI

Cetyl Ricinoleate

#### 1.2.3 Composition

Components	Source	Ratio
Cetyl Ricinoleate	vegetable	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:  
Esterification product

The product is not irradiated.

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

Origin of vegetable starting material: palm oil, castor oil

GMO-Status:

The item does not contain ingredients that might have been derived from GM sources. 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	not applicable	
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	no		
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 29181998

### 5.2 Regulatory status (chemical regulations)

Europe

Components	REACH status	CAS No.	EINECS / EC No.
Cetyl Ricinoleate	pre-registered	10401-55-5	233-864-4

Other countries

Country		yes / no	Remark
Australia	AICS:	yes	
China	IECSC:	yes	
Canada	DSL: NDSL:	yes	
Taiwan	TCSI:	yes	

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. 501146, but specifications not controlled

## 6. Toxicology and Ecotoxicology

Refer to summary of ecotoxicological and toxicological data