Intended use
O/W emulsifier for skin care

Benefits at a glance
- PEG-free, fully based on natural renewable raw materials
- Recommended usage concentration of 2 – 5%
- Co-emulsifier for O/W creams and lotions

INCI (PCPC name)
Sucrose Stearate

Chemical and physical properties (not part of specifications)

<table>
<thead>
<tr>
<th>Form</th>
<th>pellets/pellet conglomerates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLB value</td>
<td>approx. 13</td>
</tr>
</tbody>
</table>

*Note: conglomerates can occur due to filling temperature and packaging pressure.

Main properties
- TEGO® Care SE 121 is produced from natural renewable raw materials.
- TEGO® Care SE 121 is a mild, PEG-free co-emulsifier for O/W creams and lotions.
- Due to its chemical composition as a sucrose ester TEGO® Care SE 121 has moisturizing properties.
- TEGO® Care SE 121 does not contain any solvent or preservative.

Preparation
It is suggested to add TEGO® Care SE 121 to the water phase. It is also possible to add TEGO® Care SE 121 to the oil phase.

Further manufacturing conditions correspond to the principles of common processing for O/W emulsions.

Application
TEGO® Care SE 121 is especially suitable for O/W creams and lotions for
- Facial and body care
- After sun care
- Baby care

Recommended usage concentration
2.0 – 5.0% TEGO® Care SE 121

Packaging
450 kg pallet (18 x 25 kg bag)

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**

### O/W Moisturizing Body Lotion
**SZ 37/14-3**

**Phase A**
- TEGIN® 4100 Pellets (Glyceryl Stearate) 0.50%
- Stearic Acid 0.50%
- TEGOSOFT® MM (Myristyl Myristate) 1.00%
- TEGOSOFT® APM (PPG-3 Myristyl Ether) 3.00%
- TEGOSOFT® OP (Ethylhexyl Palmitate) 4.20%
- Cyclopentasiloxane 5.00%
- Tocopheryl Acetate 0.50%
- ABIL® 350 (Dimethicone) 0.30%

**Phase B**
- TEGO® Care CG 90 (Cetearyl Glucoside) 1.00%
- TEGO® Care SE 121 2.00%
- Allantoin 0.20%
- Panthenol 0.50%
- Glycerin 3.00%
- Water 76.70%

**Phase C**
- TEGO® Carbomer 141 (Carbomer) 0.20%
- TEGOSOFT® OP (Ethylhexyl Palmitate) 0.80%

**Phase D**
- Sodium Hydroxide (10% in water) 0.60%

**Phase Z**
- Preservative*, Perfume q.s.

**Preparation:**
1. Heat phase A and B separately to approx. 80 °C.
2. Add phase A to phase B with stirring.1)  
3. Homogenize.
4. Cool with gentle stirring to approx. 60 °C and add phase C.
5. Homogenize for a short time.
6. Cool with gentle stirring and add phase D below 40 °C.  

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

*Formulation was tested with 1.0% Phenoxyethanol; Ethylhexyglycerin (Euxyl PE 9010, Schülke & Mayr GmbH)

### Facial Mask
**SZ 37/14-5**

**Phase A**
- ABIL® Care 85 (Bis–PEG/PPG–16/16 PEG/PPG–16/16 Dimethicone; Caprylic/Capric Triglyceride) 1.50%
- TEGINACID® C (Ceteareth–25) 1.00%
- TEGIN® M Pellets (Glyceryl Stearate) 3.50%
- Stearyl Alcohol 2.00%
- Stearic Acid 1.00%
- TEGOSOFT® MM (Myristyl Myristate) 1.50%
- TEGOSOFT® DC (Decyl Cocoate) 6.00%
- TEGOSOFT® TN (C12–15 Alkyl Benzoate) 8.50%
- Prunus Amygdaluy Dulcis (Sweet Almond) Oil 5.00%

**Phase B**
- TEGO® Care SE 121 2.00%
- Glycerin 3.00%
- Panthenol 0.50%
- Allantoin 0.20%
- Water 63.50%

**Phase C**
- TEGO® Carbomer 134 (Carbomer) 0.10%
- Mineral Oil (30 mPas) 0.40%

**Phase D**
- Sodium Hydroxide (10% in water) 0.30%

**Phase Z**
- Preservative*, Perfume q.s.

**Preparation:**
1. Heat phase A and B separately to approx. 80 °C.
2. Add phase A to phase B with stirring.1)  
3. Homogenize.
4. Cool with gentle stirring to approx. 60 °C and add phase C.
5. Homogenize for a short time.
6. Cool with gentle stirring and add phase D below 40 °C.

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

*Formulation was tested with 0.8% Phenoxyethanol; Ethylhexyglycerin (Euxyl PE 9010, Schülke & Mayr GmbH)
O/W Body Souffle Cream  
SZ 37/14-1

<table>
<thead>
<tr>
<th>Phase</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase A</strong></td>
<td></td>
</tr>
</tbody>
</table>
AXOL® C 62 Pellets (Glyceryl Stearate Citrate) 1.50%  
TEGIN® M Pellets (Glyceryl Stearate) 2.00%  
TEGO® Alkanol 1618 (Cetearyl Alcohol) 3.00%  
TEGOSOFT® DEC (Diethylhexyl Carbonate) 20.00% |
| **Phase B** |  
TEGO® Care SE 121 1.00%  
Glycerin 3.00%  
Water 67.10% |
| **Phase C** |  
TEGO® Carbomer 341 ER (Acrylates / C10-30 Alkyl Acrylates Crosspolymer) 0.20%  
TEGOSOFT® DEC (Diethylhexyl Carbonate) 0.80% |
| **Phase D** |  
Sodium Hydroxide (10% in water) 0.60% |
| **Phase E** |  
TEGO® Betain 810 (Capryl/Capramidopropyl Betaine) 0.80% |
| **Phase Z** |  
Preservative*, Perfume q.s. |

**Preparation:**
1. Heat Phase A and B separately to 80 °C.
2. Add phase A to phase B with stirring.¹)
3. Homogenize.
4. Cool with gentle stirring to approx. 60 °C and add phase C.
5. Homogenize for a short time.
6. Cool with gentle stirring and add phase D below 40 °C.

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

*Formulation was tested with 1.0% Phenoxyethanol; Ethylhexyglycerin (Euxyl PE 9010, Schülke & Mayr GmbH)

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Body Lotion  
SZ 29/14-A4

<table>
<thead>
<tr>
<th>Phase</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase A</strong></td>
<td></td>
</tr>
</tbody>
</table>
TEGIN® 4100 Pellets (Glyceryl Stearate) 0.50%  
Stearic Acid 0.50%  
TEGOSOFT® APM (PPG-3 Myristyl Ether) 1.30%  
TEGOSOFT® OP (Ethylhexyl Palmitate) 1.60%  
TEGOSOFT® DEC (Diethylhexyl Carbonate) 1.60% |
| **Phase B** |  
TEGO® Care SE 121 2.00%  
Glycerin 3.00%  
Water 87.90% |
| **Phase C** |  
TEGO® Carbomer 141 (Carbomer) 0.20%  
TEGOSOFT® OP (Ethylhexyl Palmitate) 0.80% |
| **Phase D** |  
Sodium Hydroxide (10% in water) 0.60% |
| **Phase Z** |  
Preservative*, Perfume q.s. |

**Preparation:**
1. Heat Phase A and B separately to 80 °C.
2. Add phase A to phase B with stirring.¹)
3. Homogenize.
4. Cool with gentle stirring to approx. 60 °C and add phase C.
5. Homogenize for a short time.
6. Cool with gentle stirring and add phase D below 40 °C.

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

*Formulation was tested with 0.8% Dipropylene Glycol; Methylparaben; Ethylparaben; Aqua; Methylisothiazolinone (Microcare MEM, Thor GmbH)
### O/W Cream
#### SZ 29/14–B5

**Phase A**
- TEGIN® M Pellets (Glyceryl Stearate) 5.50%
- Stearyl Alcohol 2.00%
- TEGOSOFT® APS (PPG-11 Stearyl Ether) 3.20%
- TEGOSOFT® liquid (Cetearyl Ethylhexanoate) 3.20%
- TEGOSOFT® OP (Ethylhexyl Palmitate) 7.60%

**Phase B**
- TEGO® Care SE 121 5.50%
- Glycerin 2.00%
- Water 71.00%

**Phase Z**
- Preservative*, Perfume q.s.

**Preparation:**
1. Heat Phase A and B separately to 75 °C.
2. Add phase A to phase B with stirring.¹)
3. Homogenize.

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

*Formulation was tested with 0.8% Dipropylene Glycol; Methylparaben; Ethylparaben; Aqua; Methylisothiazolinone (Microcare MEM, Thor GmbH)

### O/W Body Butter
#### SZ 29/14–C2

**Phase A**
- TEGO® Alkanol 1618 (Cetearyl Alcohol) 3.00%
- TEGIN® M Pellets (Glyceryl Stearate) 5.00%
- TEGOSOFT® MM (Myristyl Myristate) 1.00%
- TEGOSOFT® CR (Cetyl Ricinoleate) 1.00%
- TEGOSOFT® DC (Decyl Cocoate) 7.00%
- TEGOSOFT® OER (Oleyl Erucate) 5.00%
- Glycine Soja (Soybean) Oil 3.00%
- Butyrospermum Parkii (Shea) Butter 7.00%
- Theobroma Cacao (Cocoa) Seed Butter 5.00%

**Phase B**
- TEGO® Care SE 121 3.50%
- Glycerin 5.00%
- Water 54.50%

**Phase Z**
- Preservative*, Perfume q.s.

**Preparation:**
1. Heat Phase A and B separately to 75 °C.
2. Add phase A to phase B with stirring.¹)
3. Homogenize.

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

*Formulation was tested with 1.0% Phenoxyethanol; Ethylhexylglycerin (Euxyl PE 9010, Schülke & Mayr GmbH)
**Natural O/W Lotion**  
**SZ 29/14–E1**

<table>
<thead>
<tr>
<th>Phase A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TEGOSOFT® OER (Oleyl Erucate)</td>
<td>3.00%</td>
</tr>
<tr>
<td>TEGOSOFT® MM (Myristyl Myristate)</td>
<td>2.00%</td>
</tr>
<tr>
<td>TEGOSOFT® DC (Decyl Cocoate)</td>
<td>2.00%</td>
</tr>
<tr>
<td>Simmondsia chinensis (Jojoba) Seed Oil</td>
<td>5.00%</td>
</tr>
<tr>
<td>TEGO® Alkanol 1618 (Cetearyl Alcohol)</td>
<td>1.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TEGO® Care SE 121</td>
<td>3.00%</td>
</tr>
<tr>
<td>Water</td>
<td>74.50%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase C</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>3.00%</td>
</tr>
<tr>
<td>Xanthan Gum</td>
<td>0.50%</td>
</tr>
<tr>
<td>Water</td>
<td>5.00%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase D</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide (10% in water)</td>
<td>0.20%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase E</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl Alcohol, Glycerin, Benzoic Acid,</td>
<td>0.80%</td>
</tr>
<tr>
<td>Sorbic Acid (Rokonsal BSB–N, Ashland)</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Phase Z</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Perfume</td>
<td>q.s.</td>
</tr>
</tbody>
</table>

**Preparation:**

1. Heat Phase A and B separately to 80 °C.
2. Add phase A to phase B with stirring.\(^1\)
3. Homogenize.
4. Add phase D below 30 °C.
5. Add phase E and adjust pH of formulation to 5.0 – 5.5.

\(^1\)Important: If phase A has to be charged into the vessel first, phase B must be added **without stirring**.

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**Evonik Industries AG**
Goldschmidtstraße 100   45127 Essen, Germany
P.O. BOX 45116 Essen   PHONE + 49 201 173-2909   FAX +49 173-712909
personal-care@evonik.com  www.evonik.com/personal-care