SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: COSVIVET APG DG73

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture: Surfactant

Uses advised against: At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company: Brenntag GmbH
Messeallee 11
DE 45131 Essen

Telephone: +49 (0)201 6496-0
Telefax: +49 (0)201 6496-2039
E-mail address: InfoSDB@brenntag.de

1.4. Emergency telephone number

Emergency telephone number: Emergency telephone number: +49 (0)201-6496-0 Available 24h/7d

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>REGULATION (EC) No 1272/2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hazard class</strong></td>
</tr>
<tr>
<td>Skin irritation</td>
</tr>
<tr>
<td>Serious eye damage</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.
Most important adverse effects

Human Health : See section 11 for toxicological information.

Physical and chemical hazards : See section 9/10 for physicochemical information.

Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard symbols :

Signal word : Danger

Hazard statements :
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements

Prevention :
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.

Response :
P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Hazardous components which must be listed on the label:

- D-Glucopyranose, oligomers, decyl octyl glycosides
- Alkylpolyglycoside C10-16

Regulation (EC) No 648/2004 on detergents

The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion
are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

non-ionic surfactants

Concentration: >= 30,00 %

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Amount [%]</th>
<th>Hazard class / Hazard category</th>
<th>Hazard statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkylpolyglycoside C10-16</td>
<td>&gt;= 0 - &lt;= 50</td>
<td>Skin Irrit.2 / Eye Dam.1</td>
<td>H315/H318</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>110615-47-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>600-975-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU REACH-Reg. No.</td>
<td>01-2119489418-23-xxxx</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| D-Glucopyranose, oligomers, decyl octyl glycosides | >= 0 - <= 50 | Eye Dam.1 | H318 |
| CAS-No. | 68515-73-1 |
| EC-No. | 500-220-1 (NLP) |
| EU REACH-Reg. No. | 01-2119488530-36-xxxx |

Remarks: Above mentioned components with values from zero percent to a uniform maximum concentration are replaceable substances among one another and they will be used depending on their availability.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

If inhaled: Move to fresh air. In case of shortness of breath, give oxygen. If unconscious, place in recovery position and seek medical advice.

In case of skin contact: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids.
4.2. **Most important symptoms and effects, both acute and delayed**

**Symptoms**: May have irritant effect on eyes, skin and respiratory system.

**Effects**: Risk of serious damage to eyes.

4.3. **Indication of any immediate medical attention and special treatment needed**

**Treatment**: Treat symptomatically.

---

**SECTION 5: Firefighting measures**

5.1. **Extinguishing media**

- Suitable extinguishing media: Water spray, foam, dry powder or CO2.
- Unsuitable extinguishing media: High volume water jet.

5.2. **Special hazards arising from the substance or mixture**

- Specific hazards during firefighting: The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Hazardous combustion products: Carbon dioxide (CO2), Carbon monoxide. Under certain fire conditions, traces of other toxic products cannot be excluded.

5.3. **Advice for firefighters**

- Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit).
- Further advice: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

---

**SECTION 6: Accidental release measures**

6.1. **Personal precautions, protective equipment and emergency procedures**

- Personal precautions: Use personal protective equipment. Keep away unprotected persons. Ensure adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin and eyes.

6.2. **Environmental precautions**
## Environmental precautions:
Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If material reaches soil inform authorities responsible for such cases. If the product contaminates rivers and lakes or drains inform respective authorities.

### 6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up:

Ensure adequate ventilation. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Treat recovered material as described in the section "Disposal considerations".

### 6.4. Reference to other sections

For personal protection see section 8.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Advice on safe handling:
Ensure adequate ventilation, especially in confined areas. Keep container tightly closed. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures:
Take off all contaminated clothing immediately. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin and eyes. Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

#### 7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
Keep tightly closed in a dry, cool and well-ventilated place. Keep only in the original container.

Advice on protection against fire and explosion:
The product is not flammable. Normal measures for preventive fire protection.

Further information on storage conditions:
Keep away from direct sunlight. Keep away from heat.

Advice on common storage:
Do not store together with oxidizing and self-igniting products.

German storage class:
12 Non-combustible liquids

#### 7.3. Specific end use(s)

Specific use(s):
No information available.
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Other Occupational Exposure Limit Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Additional) Information:</td>
</tr>
<tr>
<td>Contains no substances with occupational exposure limit values.</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice: In case of insufficient ventilation, wear suitable respiratory equipment.
Recommended Filter type: Combination filter: A-P2

Hand protection

Advice: Wear suitable gloves.
As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use.
The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.
To achieve a sufficient splashguard (min. break through time 10 min - 60 min) the following combination of gloves is recommended: combination of HPPE laminated film (glove thickness: 0.062 mm) and a two-layer glove consisting of nitrile rubber as coating material (glove thickness: 0.4 mm) and nylon as support material. Protective gloves should be replaced at first signs of wear.

Eye protection

Advice: Tightly fitting safety goggles

Skin and body protection

Advice: Protective work clothing

Environmental exposure controls

General advice: Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If material reaches soil inform authorities responsible for such cases.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form: liquid
Colour: yellowish
Odour: odourless
Odour Threshold: no data available
pH: 11.5 - 12.5 (10 %; 25 °C)
Melting point/freezing point: < -5 °C
Boiling point/boiling range: 100 °C
Flash point: > 100 °C
Evaporation rate: no data available
Flammability (solid, gas): no data available
Upper explosion limit: no data available
Lower explosion limit: no data available
Vapour pressure: no data available
Relative vapour density: no data available
Density: 1,100 g/cm3
Water solubility: miscible
Partition coefficient: n-octanol/water: no data available
Auto-ignition temperature: > 150 °C Auto-flammability
Thermal decomposition: no data available
Viscosity, dynamic: 300 - 600 mPa.s (20 °C)
Explosivity: no data available
Oxidizing properties: no data available

9.2. Other information
No further information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice: Stable at normal ambient temperature and pressure.

10.2. Chemical stability

Advice: No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Hazardous reactions: Stable under normal conditions.

10.4. Conditions to avoid

Conditions to avoid: Keep away from direct sunlight. Keep away from heat and sources of ignition. Avoid moisture.

10.5. Incompatible materials

Materials to avoid: No dangerous reaction known under conditions of normal use.

10.6. Hazardous decomposition products

Hazardous decomposition products: Under fire conditions: Carbon dioxide (CO2), Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Data for the product</th>
<th>Acute toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td>Acute toxicity estimate</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

|                      | Inhalation     |
| Acute toxicity estimate | > 20 mg/l     |

|                      | Dermal         |
| Acute toxicity estimate | > 2000 mg/kg |

|                      | Irritation     |
| Skin                |
RESULT:

<table>
<thead>
<tr>
<th>Result</th>
<th>Causes skin irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td></td>
</tr>
</tbody>
</table>

Result: Causes serious eye damage.

<table>
<thead>
<tr>
<th>Sensitisation</th>
<th>No sensitizing effect known.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RESULT:

CMR effects

CMR Properties

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>It is not considered carcinogenic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutagenicity</td>
<td>It is not considered mutagenic.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>It is not considered toxic for reproduction.</td>
</tr>
</tbody>
</table>

Specific Target Organ Toxicity

Single exposure

Remarks: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Repeated dose toxicity

no data available

Aspiration hazard

No aspiration toxicity classification,

Further information

Other relevant toxicity information: Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity
<table>
<thead>
<tr>
<th>Component:</th>
<th>D-Glucopyranose, oligomers, decyl octyl glycosides</th>
<th>CAS-No. 68515-73-1</th>
</tr>
</thead>
</table>

**Acute toxicity**

**Fish**

- : no data available

**Toxicity to daphnia and other aquatic invertebrates**

- : no data available

**algae**

- : no data available

<table>
<thead>
<tr>
<th>Component:</th>
<th>Alkylpolyglycoside C10-16</th>
<th>CAS-No. 110615-47-9</th>
</tr>
</thead>
</table>

**Acute toxicity**

**Fish**

- **LC50**: > 1 - 10 mg/l (fish) (semi-static test; ISO 7346/2)

**Toxicity to daphnia and other aquatic invertebrates**

- **EC50**: > 10 - 100 mg/l (invertebrates) (OECD Test Guideline 202)

**algae**

- **EC50**: > 10 - 100 mg/l (algae) (88/302/EC)

**Bacteria**

- **EC0**: > 100 mg/l (Bacteria) (OECD Test Guideline 209)

**Chronic toxicity**

**Fish**

- **NOEC**: > 1 - 10 mg/l (fish; 14 d) (OECD Test Guideline 204)
12.2. Persistence and degradability

Data for the product

Persistence and degradability

Biodegradability

<table>
<thead>
<tr>
<th>Component: D-Glucopyranose, oligomers, decyl octyl glycosides</th>
<th>CAS-No. 68515-73-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result: &gt; 60 % (Exposure Time: 28 d)</td>
<td></td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Component: Alkylpolyglycoside C10-16</th>
<th>CAS-No. 110615-47-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulation</td>
<td></td>
</tr>
<tr>
<td>Result: log Kow -0.07 (40 °C)</td>
<td>Bioaccumulation is not expected.</td>
</tr>
<tr>
<td>Result: no data available</td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Component: D-Glucopyranose, oligomers, decyl octyl glycosides</th>
<th>CAS-No. 68515-73-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>no data available</td>
</tr>
<tr>
<td>Component: Alkylpolyglycoside C10-16</td>
<td>CAS-No. 110615-47-9</td>
</tr>
<tr>
<td>Mobility</td>
<td>no data available</td>
</tr>
</tbody>
</table>

12.5. Results of PBT and vPvB assessment

Data for the product
### Results of PBT and vPvB assessment

**Result**: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6. Other adverse effects

**Data for the product**

**Additional ecological information**

**Result**: Do not flush into surface water or sanitary sewer system.

### SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Product**: Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains.

**Contaminated packaging**: Empty remaining contents. Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

**European Waste Catalogue Number**: No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

### SECTION 14: Transport information

**Not dangerous goods for ADR, RID and IMDG.**

**14.1. UN number**

| Not applicable. |

**14.2. UN proper shipping name**

| Not applicable. |

**14.3. Transport hazard class(es)**

| Not applicable. |

**14.4. Packaging group**

| Not applicable. |
14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Data for the product

<table>
<thead>
<tr>
<th>EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)</th>
<th>Point Nos.: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGK (DE)</td>
<td>WGK 1: slightly hazardous to water; (according AwSV)</td>
</tr>
<tr>
<td>German Störfallverordnung</td>
<td>Does not fall under the German StörfallV.</td>
</tr>
<tr>
<td>Other regulations</td>
<td>Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG). Take note of the national regulations on the protection of young people at work.</td>
</tr>
</tbody>
</table>

15.2. Chemical safety assessment

no data available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.
H318 Causes serious eye damage.

Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF</td>
<td>bioconcentration factor</td>
</tr>
<tr>
<td>BOD</td>
<td>biochemical oxygen demand</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service</td>
</tr>
</tbody>
</table>
CLP Classification, Labelling and Packaging
CMR carcinogenic, mutagenic or toxic to reproduction
COD chemical oxygen demand
DNEL derived no-effect level
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
GHS Globally Harmonized System of Classification and Labelling of Chemicals
LC50 median lethal concentration
LOAEC lowest observed adverse effect concentration
LOAEL lowest observed adverse effect level
LOEL lowest observed effect level
NLP no-longer polymer
NOAEC no observed adverse effect concentration
NOAEL no observed adverse effect level
NOEC no observed effect concentration
NOEL no observed effect level
OECD Organisation for Economic Cooperation and Development
OEL occupational exposure limit
PBT persistent, bioaccumulative and toxic
REACH Auth. No.: REACH Authorisation Number
REACH AuthAppC. No.: REACH Authorisation Application Consultation Number
PNEC predicted no-effect concentration
STOT specific target organ toxicity
SVHC substance of very high concern
UVCB substance of unknown or variable composition, complex reaction products or biological materials
vPvB very persistent and very bioaccumulative

Key literature references and sources for data: Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Methods used for product classification: The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.

Hints for trainings: The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.

|| Indicates updated section.
The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.

The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.