1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : GLYCERIN HOCHREIN 99,5% PF  
CAS-No. : 56-81-5  
EC-No. : 200-289-5

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Recommended restrictions on use : At that time we do not yet have information on use restrictions. They will be included in this safety data sheet when available.

1.3. Details of the supplier of the safety data sheet

Company : Biesterfeld Chemiedistribution GmbH  
Schellerdamm 16  
DE 21079 Hamburg

Telephone : +49 (0)69-40101-71  
Telefax : +49 (0)69-40101-34

E-mail address : InfoSDB@bcd-chemie.de  
Responsible/issuing person : Umwelt / Sicherheit

1.4. Emergency telephone number

Emergency telephone number : +49 (0)208-7828-0  Available 24h/7d

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.
Classification according to EU Directives 67/548/EEC or 1999/45/EC

This substance is not classified as dangerous according to Directive 67/548/EEC.

Most important adverse effects

Human Health : See section 11 for toxicological information. No further information available.

Physical and chemical hazards : See section 9 for physicochemical information. No further information available.

Potential environmental effects : See section 12 for environmental information. No further information available.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is not labeled as dangerous according to Regulation (EC) No. 1272/2008.

Additional Labelling:

Handle in accordance with good industrial hygiene and safety practice.

2.3. Other hazards

No other information is available.

3. Composition/information on ingredients

3.1. Substances
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Print Date 08.02.2012

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identification Number</th>
<th>Amount [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>CAS-No.: 56-81-5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC-No.: 200-289-5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;= 99,5</td>
</tr>
</tbody>
</table>

### 4. First aid measures

#### 4.1 Description of first aid measures

**General advice**
- Take off all contaminated clothing immediately.

**If inhaled**
- Move to fresh air. If symptoms call a physician.

**In case of skin contact**
- Wash off immediately with soap and plenty of water. If symptoms call a physician.

**In case of eye contact**
- Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

**If swallowed**
- Rinse the mouth and spit the fluids out. Immediately give plenty of water (if possible charcoal slurry). Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms**
- No information available.

**Effects**
- Health injuries are not known or expected under normal use.

#### 4.3 Indication of any immediate medical attention and special treatment needed

**Treatment**
- Treat symptomatically.

### 5. Fire-fighting measures

#### 5.1. Extinguishing media

R13686
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 fire fighting: The product is flammable but not readily ignited. Fire may cause evolution of: Carbon oxides, acrylaldehyde

5.3. Advice for firefighters

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)
Further information: Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray.

6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Avoid subsoil penetration.

6.3 Methods and materials for containment and cleaning up

Methods and materials for: Ensure adequate ventilation. Absorb with liquid-binding
containment and cleaning up
material (sand, diatomite, acid binders, universal binders). Treat recovered material as described in the section "Disposal considerations". After cleaning, flush away traces with water.

6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Vapours are heavier than air and may spread along floors. Provide sufficient air exchange and/or exhaust in work rooms. Avoid inhalation of vapour or mist.

Hygiene measures : Take off all contaminated clothing immediately. Do not breathe gas/fumes/vapour/spray. 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 : Jointless smooth floor Keep away from heat and sources of ignition. Keep in a dry, cool and well-ventilated place.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on common storage : Keep away from food, drink and animal feedingstuffs. Do not store together with oxidizing and self-igniting products. Incompatible with oxidizing agents.

German storage class : 10 Combustible liquids.
Other data : No decomposition if stored and applied as directed.

7.3 Specific end uses

Specific use(s) : No information available.

8. Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Personal protective equipment

Respiratory protection

Advice : Breathing apparatus needed only when aerosol or mist is formed. Recommended Filter type:A

Hand protection

Advice : Protective gloves

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.

The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove.

The following materials are suitable:

Material : butyl-rubber
Gloves : > 480 min
Glove thickness : 0,5 mm
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Material : Nitrile rubber
Gloves : > 480 min
Glove thickness : 0,35 mm

Material : Fluorinated rubber
Gloves : > 480 min
Glove thickness : 0,4 mm

Eye protection
Advice : Safety glasses

Skin and body protection
Advice : Protective work clothing

Environmental exposure controls
General advice : Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Avoid subsoil penetration.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Form : viscous
Colour : colourless
Odour : odourless
Odour Threshold : no data available
pH : ca. 7
\[ 20 \, ^\circ\text{C} \]
Melting point/range : ca. 18 °C
Boiling point/boiling range : 290 °C
Flash point : ca. 177 °C

Evaporation rate : no data available
Flammability (solid, gas) : not applicable
Upper explosion limit : no data available
Lower explosion limit : no data available
Vapour pressure : < 0.01 hPa
               : 20 °C
Relative vapour density : no data available
Density : 1,261 g/cm³
          : 25 °C
Water solubility : completely miscible
Partition coefficient: n-octanol/water : no data available
Ignition temperature : no data available
Thermal decomposition : no data available
Viscosity, dynamic : 1.300 mPa.s
                    : 20 °C
Explosive properties : Not explosive
Oxidizing properties : none

9.2 Other information
No further information available.

10. Stability and reactivity
10.1. Reactivity
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Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability
Advice : Stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous reactions : None known.

10.4. Conditions to avoid
Conditions to avoid : Keep away from heat and sources of ignition. Protect from humidity and keep away from water. Product is hygroscopic.

Thermal decomposition : no data available

10.5. Incompatible materials
Materials to avoid : Strong oxidizing agents

10.6. Hazardous decomposition products
Hazardous decomposition products : Under fire conditions:
Carbon oxides
acrylaldehyde

11. Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Product: GLYCERIN 99,5%</th>
<th>CAS-No. 56-81-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritation</td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td></td>
</tr>
</tbody>
</table>

Remarks : May cause skin irritation in susceptible persons.
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<table>
<thead>
<tr>
<th>Eyes</th>
</tr>
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<tbody>
<tr>
<td>Remarks</td>
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<table>
<thead>
<tr>
<th>Sensitisation</th>
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<td>Remarks</td>
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<table>
<thead>
<tr>
<th>Further information</th>
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</thead>
<tbody>
<tr>
<td>Other relevant toxicity information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component: Glycerol</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56-81-5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acute toxicity</th>
</tr>
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<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Value type</td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Species</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value type</td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Species</td>
</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Component: Glycerol</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56-81-5</td>
</tr>
</tbody>
</table>
### Acute toxicity

#### Fish

<table>
<thead>
<tr>
<th>Species</th>
<th>Value type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leuciscus idus (Golden orfe)</td>
<td>LC50</td>
<td>&gt; 10,000 mg/l</td>
</tr>
</tbody>
</table>

#### Toxicity to daphnia and other aquatic invertebrates.

<table>
<thead>
<tr>
<th>Species</th>
<th>Value type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daphnia magna</td>
<td>LC50</td>
<td>&gt; 10,000 mg/l</td>
</tr>
</tbody>
</table>

#### Bacteria

<table>
<thead>
<tr>
<th>Species</th>
<th>Exposure time</th>
<th>Value type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pseudomonas putida</td>
<td>16 h</td>
<td>EC50</td>
<td>&gt; 10,000 mg/l</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Product: GLYCERIN 99,5%</th>
<th>CAS-No. 56-81-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td></td>
</tr>
<tr>
<td>Biodegradability</td>
<td></td>
</tr>
</tbody>
</table>
| Remarks: Readily biodegradable.

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product: GLYCERIN 99,5%</th>
<th>CAS-No. 56-81-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulation</td>
<td></td>
</tr>
</tbody>
</table>

R13686 11/15 EN
12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Product: GLYCERIN 99,5%</th>
<th>CAS-No. 56-81-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td>no data available</td>
</tr>
</tbody>
</table>

12.5. Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>Product: GLYCERIN 99,5%</th>
<th>CAS-No. 56-81-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results of PBT and vPvB assessment</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td>no data available</td>
</tr>
</tbody>
</table>

12.6. Other adverse effects

<table>
<thead>
<tr>
<th>Product: GLYCERIN 99,5%</th>
<th>CAS-No. 56-81-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional ecological information</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td>Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.</td>
</tr>
</tbody>
</table>

13. Disposal considerations

13.1. Waste treatment methods

Product : Disposal together with normal waste is not allowed. The product should not be allowed to enter drains, water courses or the soil. Can be disposed of as a solid waste or burned in a suitable installation subject to local regulations.

Contaminated packaging : Risk of explosion. Do not burn, or use a cutting torch on, the
empty drum. Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Rinse with plenty of water.

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.

14. Transport information

Not dangerous goods

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.
15. Regulatory information

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

WGK (DE) : WGK Identification Number: 116; WGK 1; slightly water endangering; WGK (DE); Classification according VwVwS of 17 May 1999, Annex 2
Major Accident Hazard Legislation : - Does not fall under the German StörfallV.
Other regulations : Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical Safety Assessment

Currently we do not have any Information from our supplier about this.

16. Other information

Full text of R-phrases referred to under sections 2 and 3.

Further information

Other information : The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

|| Indicates updated section.