

Safety data sheet according to 1907/2006/EC, Article 31

Printing date: 28.06.2012

Version: 4

Revision: 28.06.2012

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

- **1.1 Product identifier**
- **Trade name:** **CremerGLYC Refined Glycerine 99,5% + 86,5%**
- **CAS Number:**
56-81-5
- **EC number:**
200-289-5
- **1.2 Relevant identified uses of the substance or mixture and uses advised against: -**
- **Application of the substance / the preparation:**
Basic raw material for the chemical industry
Manufacturing of food
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier/Manufacturer:**
CREMER OLEO GmbH & Co. KG
Glockengiesserwall 3
20095 Hamburg
Germany

Tel.: +49-40-32011-0
Fax: +49-40-321757
- **Email competent person:** quality47@cremer-gruppe.com
- **Information department:** See supplier/manufacturer
- **1.4 Emergency telephone number:**
GIZ-Nord, Göttingen, Germany
+49 551 19240

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008** The substance is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** not applicable
- **Information concerning particular hazards for human and environment:**
According to current European laws and regulations the product is not dangerous or toxic material (based on the available data).
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterization: Substances**
- **CAS No. Description:**
56-81-5 glycerol
- **Identification number(s):**
- **EC number:** 200-289-5

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SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:** If symptoms persist or in case of doubt, seek medical advice.

· **After inhalation:** Supply fresh air; consult a doctor in case of pain.

· **After skin contact:**

Remove soiled clothes and shoes.

Wash with water and soap.

· **After eye contact:** Rinse the eyes with open eyelids for 10 - 15 minutes with water. Then consult a doctor (eye specialist).

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting.

Seek medical treatment.

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

After the uptake of large quantities:

Headache

Vomiting

Gastric or intestinal disorders.

Diarrhoea

· 4.3 Indication of any immediate medical attention and special treatment needed Symptomatic treatment

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** High volume water jet

· 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Acrolein

Irritant gases/vapours

· 5.3 Advice for firefighters

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear a fully protective suit.

· **Additional information:**

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Ensure adequate ventilation.

Keep unprotected persons away.

· 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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Make sure to recycle or dispose of in suitable receptacles.

· **6.4 Reference to other sections**

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** Fumes may combine with air to form an explosive mixture.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store at ambient temperatures and under dry conditions.
Suitable material for containers and packaging:
Stainless steel
Aluminium
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from feed.
Store away from strong oxidizers.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from humidity and water.
- **Storage class:** 10 Combustible liquids
- **7.3 Specific end use(s)** No further relevant information available

* SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
- **56-81-5 glycerol**
WEL (Great Britain) Long-term value: 10 mg/m³
OEL (Ireland) Long-term value: 10 mg/m³
- **DNELs**
Abbreviations:
In = Industrial
Prof = Professional
Cons = Consumer

LLE = Long term, local effects
LSE = Long term, systemic effects
SLE = Short term, local effects
SSE = Short term, systemic effects
Oral DNEL/Cons/LSE 229 mg/kg bw/day (human)
Inhalative DNEL/Cons/LLE 33 mg/m³ (human)
DNEL/Prof/LLE 56 mg/m³ (human)
- **PNECs**
Abbreviations:
aq = aqua
sed = sediment
PNEC 0.141 mg/kg (soil)

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1000 mg/l (sewage treatment plant)

PNEC/Aq 0.885 mg/l (fresh water)

8.85 mg/l (intermittent release)

0.0885 mg/l (marine water)

PNEC/sed 3.3 mg/kg (fresh water)

0.33 mg/kg (marine water)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures should be adhered to when handling chemicals.

Do not eat or drink while working.

Wash hands before breaks and at the end of work.

· **Breathing equipment:**

Not necessary if room is well-ventilated

Use suitable respiratory protective device only when aerosol or mist forms.

In case of unintentional release of substance, exceeding the occupational exposure limit value:

Filter A/P2

Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust.

· **Protection of hands:**

Not required

At longer contact: protective gloves

· **Material of gloves:** Nitrile rubber, NBR

· **Penetration time of glove material:**

480 min nitrile rubber (0.11 mm)

The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Basket goggles (DIN EN 58211, code number 3) or face protection shield

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information:**

· **Appearance:**

Form:	Liquid Viscous
Colour:	Colourless
Odour:	Odourless

· **pH-value:** Neutral

· **Change in condition:**

· **Melting point/Melting range:** ~18°C (99,5%) / -10 (86,5%)

· **Boiling point/Boiling range:** 290°C (99,5%) / ~130°C (86,5%)

· **Flash point:** 199°C (Pensky-Martens closed cup) (99,5%) / 160°C (86,5%)

· **Ignition temperature:** 370°C (99,5%) / 400°C (86,5%)

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures is possible.

· **Explosion limits:**

· **Lower:** 2,7 Vol% (99,5%) / 0,9 Vol% (86,5%)

· **Upper:** 19 Vol% (99,5%)

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· Vapour pressure at 50°C:	0.0025 mm Hg (99,5%)
· Density:	20°C: 1,26 g/cm ³ (99,5%) / 1,23 g/cm ³ (86,5%)
· Solubility in / Miscibility with Water at 25°C:	1000 g/l (99,5%)
· Partition coefficient (n-octanol/water):	-1,76
· Viscosity:	
dynamic:	20°C: 1412mPas (OECD114) (99,5%) / 136mPas (86,5%)
kinematic:	Not determined
Surface tension at 20°C:	~63.4 mN/m
· 9.2 Other information	Miscible with alcohol

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications
In case of elevated temperatures, risk of exothermic polymerisation (> 200 °C)
To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions**
On contact with strong oxidizing substances like nitric acid or other strong acids, explosive reactions may be possible.
- **10.4 Conditions to avoid** No further relevant information available
- **10.5 Incompatible materials:** Strong oxidants
- **10.6 Hazardous decomposition products:**
In case of fire or high temperatures the formation of following decomposition products is possible:
Carbon monoxide and carbon dioxide
Acrolein

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity:**
 - **LD/LC50 values that are relevant for classification:**
- | | | |
|--------|------------------|--------------------------|
| Oral | LD ₅₀ | 11500 mg/kg (guinea pig) |
| | | ~23000 mg/kg (mouse) |
| | | 27200 mg/kg (rat) |
| Dermal | LD ₅₀ | 56750 mg/kg (guinea pig) |
| | | >18700 mg/kg (rabbit) |
- Inhalative NOAEL 0.167 mg/l (rat)
- **Primary irritant effect:**
 - **on the skin:** No irritating effect
 - **on the eye:** No irritating effect
 - **Sensitization:** Not determined
 - **Other information (about experimental toxicology):** Ames-test: negative
 - **Carcinogenic, mutagenic effects and adverse effects on reproduction:**
Presently available data show no carcinogenic, mutagenic or teratogenic effects.
 - Oral NOAEL(developmental) 1280 mg/kg bw/day (mouse)
 - 1310 mg/kg bw/day (rat)
 - 1180 mg/kg bw/day (rabbit)

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· **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

· **Repeated dose toxicity:**

Oral NOAEL 8000-10000 mg/kg/day (rat)

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

EC₅₀/8d (static) > 10000 mg/l (Scenedesmus quadricauda)

LC₅₀ 1100 mg/l (rat)
(7h)

LC₅₀/24h >5000 mg/l (Carrassius auratus)

LC₅₀/48h 1955 mg/l (Daphnia magna)

LC₅₀/96h (static) 54000 mg/l (Onchorhynchus mykiss)

885 mg/l (Pimephales promelas)

· **12.2 Persistence and degradability** No further relevant information available

· **Henry's Law constant H [atm m³/mol]** 0,000000006 atm m³/mol

· **Other information:**

The product is easily biodegradable.

The total of the organic components contained in the product achieve values above 60% BOD/COD or resp. above 70% DOC reduction in tests for biodegradability. Thus threshold values for 'readily degradable' (e.g. to OECD method 301) are reached.

Biological degradation: 97% after 1 days
(99,5%)

· **12.3 Bioaccumulative potential** No further relevant information available

· **12.4 Mobility in soil** No further relevant information available

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous to water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Danger to drinking water is possible if large quantities leak into the ground or into water course.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable

· **vPvB:** Not applicable

· **12.6 Other adverse effects** No further relevant information available

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation:** Disposal according to instructions of local authorities

· **European waste catalogue:**

07 01 99 wastes not otherwise specified

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, ADN · Class	Void
· IMDG, IATA · Class	Void No hazardous good according to the regulation
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.6 Special precautions for user	Not applicable
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
· UN "Model Regulation":	-

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Technical guidance (air):**
- **Class Share in %:**
- **NK 100.0**
- **Water hazard class:**
Water hazard class 1 (Assessment by list): slightly hazardous for water
Ident number.: 116
According to VwVw from 27.7.2005
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Reasons for amendments:**
Change of trade name
Version 1-2 is/are not available for this language.
 - **Replaces version dated:** 13.6.2012
 - **Department issuing MSDS:**
KFT Chemieservice GmbH
Im Leuschnerpark. 3 64347 Griesheim
Postfach 1451 64345 Griesheim
Germany
- Phone: +49 6155 86829-0 Fax: +49 6155 86829-25
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· **Contact:** Dr. Sonja Fischer

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· **Sources:** IUCLID-Dossier from ECHA

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