

CremerGLYC Refined Glycerine 99,5% + 86,5%

Safety Data Sheet

A safety data sheet is not required for this product in accordance with national legal requirements. This document has been created on a voluntary basis following the format of the safety data sheet.

Issue date: 22/03/2020 Revision date: 22/03/2020 Supersedes: 26/04/2017 Version: 5.00

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

1.1. Product identifier

Product form : Substance
Trade name : CremerGLYC Refined Glycerine 99,5% + 86,5%
Chemical name : glycerol
EC-No. : 200-289-5
CAS-No. : 56-81-5
Formula : C₃H₈O₃

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Raw material: Chemical industries, Manufacturing of food

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

CREMER OLEO GmbH & Co. KG
Glockengiesserwall 3
20095 Hamburg - Germany
T +49-40-32011-0 - F +49-40-321757

Email competent person

quality47@cremer.de

1.4. Emergency telephone number

Emergency 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 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
glycerol	(CAS-No.) 56-81-5 (EC-No.) 200-289-5	86.5 – 99.5

3.2. Mixtures

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Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In case of doubt or persistent symptoms, consult always a physician.
First-aid measures after inhalation	: Move to fresh air. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Remove dirty clothes. After contact with skin, wash immediately and thoroughly with water and soap.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Consult an ophtalmologist if irritation persists.
First-aid measures after ingestion	: Spit. Rinse mouth. Drink plenty of water. Do not induce vomiting. If you feel unwell, seek medical advice.

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

Symptoms/effects after ingestion : Gastrointestinal pain. Headache. Vomiting.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide. Dry powder. Water spray. Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Thermal decomposition generates toxic vapours. Corrosive vapours. acrolein; prop-2-enal; acrylaldehyde.

5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. On heating, there is a risk of bursting due to internal pressure build-up. Cool down the containers exposed to heat with a water spray.
Other information	: Cool closed containers exposed to fire with water spray. Contain the spreading of extinguishing fluids (this product may be hazardous for the environment).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use protective clothing. Remove ignition sources. Ensure adequate air ventilation.

6.1.1. For non-emergency personnel

Protective equipment	: Concerning personal protective equipment to use, see section 8.
Emergency procedures	: Do not breathe vapours.

6.1.2. For emergency responders

Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid sub-soil penetration. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material, e.g.: sand, saw dust.
Other information	: Shovel into suitable and closed container for disposal.

6.4. Reference to other sections

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Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Keep away from sources of ignition - No smoking. Do not breathe vapours.
Hygiene measures	: Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep container tightly closed. Store in a dry place. Store at room temperature. Keep away from heat and direct sunlight.
Information about storage in one common storage facility	: Keep away from strong oxidizers.
Packaging materials	: plastic. Polyethylene (high density). Aluminium. Uncoated stainless steel.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

glycerol (56-81-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Glycerol
WEL TWA (mg/m ³)	10 mg/m ³ mist
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

glycerol (56-81-5)	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	56 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	229 mg/kg bodyweight/day
Long-term - local effects, inhalation	33 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.885 mg/l
PNEC aqua (marine water)	0.088 mg/l
PNEC aqua (intermittent, freshwater)	8.85 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.3 mg/kg dwt
PNEC sediment (marine water)	0.33 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.141 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1000 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Wash hands before break and at end of works.

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Hand protection:

In case of repeated or prolonged contact wear gloves. EN 374. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,35	No additional information available	EN ISO 374
Chemically resistant protective gloves	Butyl rubber	6 (> 480 minutes)	0,5	No additional information available	EN ISO 374

Eye protection:

Use splash goggles when eye contact due to splashing is possible. EN 166

Skin and body protection:

Wear suitable protective clothing. EN 340. EN 13034

Respiratory protection:

No respiratory protection needed under normal use conditions. In case of inadequate ventilation wear respiratory protection. Breathing apparatus needed only when vapour or mist is formed. Particle filter. 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

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use. Separate working clothes from town clothes. Launder separately.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous.
Colour	: colourless.
Odour	: odourless.
Odour threshold	: No data available
pH	: Neutral
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: $\approx 18\text{ °C}$ (99,5%) / -10 °C (86,5%)
Freezing point	: No data available
Boiling point	: 290 °C (99,5%) / $\sim 130\text{ °C}$ (86,5%)
Flash point	: 199 °C (99,5%) / 160 °C (86,5%); (closed cup)
Auto-ignition temperature	: 370 °C (99,5%) / 400 °C (86,5%)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 0.0025 mm Hg (99,5%; 50 °C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.26 g/cm^3 (99,5%) / 1.23 g/cm^3 (86,5%); (20 °C)
Solubility	: Water: 1000 g/l (99,5%; 25 °C) Ethanol: Miscible
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: -1.76
Viscosity, kinematic	: No data available
Viscosity, dynamic	: $1412\text{ mPa}\cdot\text{s}$ (99,5%) / $136\text{ mPa}\cdot\text{s}$ (86,5%) (20 °C ; (OECD 114 method))
Explosive properties	: Product is not explosive. In use, may form flammable/explosive vapour-air mixture.
Oxidising properties	: Non oxidizing.
Lower explosive limit (LEL)	: $2.7\text{ vol \%}$ (99,5%) / $0.9\text{ Vol\%}$ (86,5%)

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Upper explosive limit (UEL) : 19 vol % (99,5%)

9.2. Other information

Other properties : Surface tension. ~63,4 mN/m.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available.

10.2. Chemical stability

No decomposition if stored normally.

10.3. Possibility of hazardous reactions

Reacts vigorously with strong oxidizers and acids.

10.4. Conditions to avoid

No additional information available.

10.5. Incompatible materials

Oxidizing agent. Strong acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

glycerol (56-81-5)	
LD50 oral rat	> 5000 mg/kg bodyweight
LD50 oral	≈ 23000 mg/kg bodyweight (mouse, male)
LC50 inhalation rat (Vapours - mg/l/4h)	> 2.75 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: Neutral

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: Neutral

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

glycerol (56-81-5)	
Viscosity, kinematic	1120.63 mm²/s

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

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Hazardous to the aquatic environment, long-term (chronic) : Not classified

glycerol (56-81-5)

LC50 fish 1	54000 mg/l (96 h; Oncorhynchus mykiss)
EC50 Daphnia 1	1955 mg/l (48 h; Daphnia magna)

12.2. Persistence and degradability

glycerol (56-81-5)

Persistence and degradability	Readily biodegradable.
Biodegradation	94 % (24 h)

12.3. Bioaccumulative potential

glycerol (56-81-5)

Partition coefficient n-octanol/water (Log Kow)	-1.76
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

glycerol (56-81-5)

Surface tension	≈ 63.4 mN/m (20 °C)
Ecology - soil	No additional information available.

12.5. Results of PBT and vPvB assessment

glycerol (56-81-5)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Disposal must be done according to official regulations. European waste catalogue.
Product/Packaging disposal recommendations	: Avoid release to the environment. Do not re-use empty containers without proper cleaning or reconditioning.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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14.5. Environmental hazards

Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
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No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

glycerol is not on the REACH Candidate List

glycerol is not on the REACH Annex XIV List

CremerGLYC Refined Glycerine 99,5% + 86,5% is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

CremerGLYC Refined Glycerine 99,5% + 86,5% is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations

: A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

General revision.

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
IATA	International Air Transport Association
DNEL	Derived-No Effect Level

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EC50	Median effective concentration
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA (European Chemicals Agency).
Department issuing data : KFT Chemieservice GmbH
specification sheet: Im Leuschnerpark. 3 64347 Griesheim
Germany

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KFT SDS EU 05

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.