

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Substance  
Trade name : Reinzolub  
Chemical name : glycerol  
EC-No. : 200-289-5  
CAS-No. : 56-81-5  
Article number : 70-38751-00

**1.2. Relevant identified uses of the substance or mixture and uses advised against****1.2.1. Relevant identified uses**

Main use category : Professional uses  
Use of the substance/mixture : Lubricant

**1.2.2. Uses advised against**

No additional information available

**1.3. Details of the supplier of the safety data sheet****Supplier**

Reinz-Dichtungs GmbH  
Reinzstr. 3-7  
89209 Neu-Ulm - GERMANY  
T +49-(0)731-7046-0

**Email competent person**

sds@kft.de

**1.4. Emergency telephone number**

Emergency number : National Health Service (NHS)  
24 hour national number consumer  
England and Scotland: 111  
Wales: 0845 46 47  
Northern Ireland: call your local General Practitioner  
  
Call 999 if there is a life-threatening incident.

**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**

No additional information available

**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	-

# Reinzolub

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

### 3.2. Mixtures

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. Wash with plenty of water/...
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Consult an ophthalmologist 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 : 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 : Wear personal protective clothing (see chapter 8).

### 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

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

# Reinzolub

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

### 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 food, drink and animal feeding stuffs. 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	Local name	Glycerol
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> mist
United Kingdom	Regulatory reference	EH40. HSE

#### glycerol (56-81-5)

##### DNEL/DMEL (Workers)

Long-term - local effects, inhalation	56 mg/m <sup>3</sup>
---------------------------------------	----------------------

##### DNEL/DMEL (General population)

Long-term - systemic effects, oral	229 mg/kg bodyweight/day
Long-term - local effects, inhalation	33 mg/m <sup>3</sup>

##### 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.

##### Hand protection:

In case of repeated or prolonged contact wear gloves. 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

# Reinzolub

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

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

### Eye protection:

Chemical goggles

### Skin and body protection:

Wear suitable protective clothing

### 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. Filter type: A.

### 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	: ≈ 18 °C
Freezing point	: No data available
Boiling point	: 290 °C
Flash point	: 177 °C (Open cup)
Auto-ignition temperature	: 370 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 0.01 hPa
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.26 g/cm <sup>3</sup> (20°C)
Solubility	: Water: 1000 g/l Miscible Ethanol: Miscible
Log Pow	: No data available
Log Kow	: -1.75 (25°C; pH 7,4)
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 1412 mPa.s (20°C; (OECD 114 method))
Explosive properties	: Product is not explosive. In use, may form flammable/explosive vapour-air mixture.
Oxidising properties	: No data available
Lower explosive limit (LEL)	: 2.7 vol %
Upper explosive limit (UEL)	: 19 vol %

### 9.2. Other information

No additional information available

# Reinzolub

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

### 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 (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

#### glycerol (56-81-5)

LD50 oral rat	> 5000 mg/kg bodyweight
LD50 oral	≈ 23000 mg/kg (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	1120.635 mm <sup>2</sup> /s
----------------------	-----------------------------

### SECTION 12: Ecological information

#### 12.1. Toxicity

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

#### 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.
-------------------------------	------------------------

# Reinzolub

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Biodegradation	94 % (24 h)
----------------	-------------

### 12.3. Bioaccumulative potential

#### glycerol (56-81-5)

Log Kow	-1.75 (25°C; pH 7,4)
---------	----------------------

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.

European List of Waste (LoW) code : 07 07 99 - wastes not otherwise specified

## SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

# Reinzolub

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

### Inland waterway transport

Not applicable

### Rail transport

Not applicable

### 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

#### 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

### 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
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).

# Reinzolub

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

---

Department issuing data  
specification sheet:

: KFT Chemieservice GmbH  
Im Leuschnerpark. 3 64347 Griesheim  
Postfach 1451 64345 Griesheim  
Germany

Phone: +49 6155-8981-400 Fax: +49 6155 8981-500  
Safety Data Sheet Service: +49 6155 8981-522

Contact person

: Dr. Sebastian Kitzig

KFT SDS EU 01

*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*