

SAFETY DATA SHEET

according to EC directive 2001/58/EC
Version 3.0 Revision Date 14.05.2007
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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : **Glycerol**

Product Number : 15523
Brand : Riedel

Company : Sigma-Aldrich Company Ltd.
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C₃H₈O₃
Molecular Weight : 92.09 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration [%]
Glycerol				
56-81-5	200-289-5	-	-	-

3. HAZARDS IDENTIFICATION

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

4. FIRST AID MEASURES

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Normal measures for preventive fire protection.

Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Glycerol	56-81-5	TWA	10 mg/m ³	1997-01-01	UK. Health and Safety Commission, EH 40/2005, Workplace exposure limits
Remarks	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used				

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid
Colour	clear
Odour	odourless

Safety data

pH	5.5 - 8
Melting point	20 °C
Boiling point	182 °C at 26.7 hPa 290 °C 290 °C

Flash point	160 °C - closed cup
Ignition temperature	370 °C
Lower explosion limit	0.9 %(V)
Vapour pressure	< 0.13 hPa at 20 °C
Density	1.2620 g/cm ³ 1.2610 g/cm ³
Water solubility	soluble

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong bases, Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.

Carbon oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 12,600 mg/kg

LC50 Inhalation - rat - 1 h - > 570 mg/m³

LD50 Dermal - rabbit - > 10,000 mg/kg

Irritation and corrosion

Skin - rabbit - Mild skin irritation - 24 h

Eyes - rabbit - Mild eye irritation - 24 h

Sensitization

no data available

Chronic exposure

no data available

Signs and Symptoms of Exposure

prolonged or repeated exposure can cause:, Nausea, Headache, Vomiting

Potential Health Effects

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation.

Skin

May be harmful if absorbed through skin. May cause skin irritation.

Eyes

May cause eye irritation.

Ingestion

May be harmful if swallowed.

Target Organs

Kidney,

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

Toxicity to fish LC50 - Carassius auratus (goldfish) - > 5,000 mg/l
 LC50 - Pimephales promelas (fathead minnow) - 44,000 mg/l
 LC50 - other fish - > 100,100 mg/l
 LC50 - Oncorhynchus mykiss (rainbow trout) - 67,500 mg/l - 96 h

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS**Product**

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION**ADR/RID**

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION**Labelling according to EC Directives**

Further information:

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

16. OTHER INFORMATION**Further information**

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