

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006**GLYCERINE (ALL GRADES)**

Version 4.1

Print Date 2015/06/08

Revision date / valid from 2015/06/08

MSDS code: MGLY100**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name : GLYCERINE (ALL GRADES)
Substance name : Glycerol
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.

Uses advised against : At this moment we have not identified any uses advised against

Remarks : This substance is exempt from registration according to Regulation (EC) No. 1907/2006 (REACH).

1.3. Details of the supplier of the safety data sheet

Company : Brenntag UK & Ireland
Albion House, Rawdon Park
GB LS19 7XX Leeds Yeadon

Telephone : +44 (0) 113 3879 200
Telefax : +44 (0) 113 3879 280
E-mail address : msds@brenntag.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number (open 24 hours):
+44 (0) 1865 407333 (N.C.E.C. Culham)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

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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.
Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Most important adverse effects

Human Health : See section 11 for toxicological information.
Physical and chemical hazards : See section 9 for physicochemical information.
Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Other labelling information:

Further information : Handle in accordance with good industrial hygiene and safety practice.

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.
The product does not need to be labelled in accordance with EC directives or respective national laws.

SECTION 3: Composition/information on ingredients

3.1. Substances

Non-hazardous component

| Chemical Name | Identification Number | Amount [%] |
|---------------|---------------------------------------|------------|
| Glycerol | CAS-No. : 56-81-5 EC-No. 200-289-5 | <= 100 |

SECTION 4: First aid measures

4.1. Description of first aid measures

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| | |
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| General advice | : No special precautions required. |
| If inhaled | : Remove to fresh air. If symptoms persist, call a physician. |
| In case of skin contact | : Wash off with soap and water. |
| In case of eye contact | : Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician. |
| If swallowed | : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. |

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

| | |
|----------|--|
| Symptoms | : See Section 11 for more detailed information on health effects and symptoms. |
| Effects | : See Section 11 for more detailed information on health effects and symptoms. |

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

| | |
|-----------|---|
| Treatment | : Treat symptomatically. No further information available. |
|-----------|---|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|---|
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : No information available. |

5.2. Special hazards arising from the substance or mixture

| | |
|--------------------------------------|---|
| Specific hazards during firefighting | : Under fire conditions: Carbon monoxide, Carbon dioxide (CO ₂) |
|--------------------------------------|---|

5.3. Advice for firefighters

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| Special protective equipment for firefighters | : In the event of fire, wear self-contained breathing apparatus. Wear personal protective equipment. |
| Further advice | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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| Personal precautions | : Use personal protective equipment. Avoid contact with skin |
|----------------------|--|

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and eyes. For personal protection see section 8.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal.

Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures : 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. Provide adequate ventilation. Avoid contact with the skin and the eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep only in the original container.

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

Further information on storage conditions : Keep tightly closed in a dry and cool place. Keep away from heat. Protect from frost.

Advice on common storage : Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Specific use(s) : No information available.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | | |
|---|-----------------|------------------------|
| Component: | Glycerol | CAS-No. 56-81-5 |
| Other Occupational Exposure Limit Values | | |

EH40 WEL, Time Weighted Average (TWA);, Mist.
10 mg/m³

ELV (IE), Time Weighted Average (TWA);, Mist.
10 mg/m³

8.2. Exposure controls

Personal protective equipment

Respiratory protection

Advice : Required if dust is released
Dust-mask

Hand protection

Advice : Protective gloves

Eye protection

Advice : Safety goggles

Skin and body protection

Advice : Protective work clothing

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form : viscous
liquid

Colour : colourless

Odour : odourless

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| | |
|--|-----------------------------------|
| Odour Threshold | : no data available |
| pH | : 7 |
| Melting point/range | : 18 °C |
| Boiling point/boiling range | : 290 °C |
| Flash point | : 177 °C |
| Evaporation rate | : no data available |
| Flammability (solid, gas) | : no data available |
| Upper explosion limit | : 20 %(V) |
| Lower explosion limit | : 10 %(V) |
| Vapour pressure | : < 0.01 hPa |
| Relative vapour density | : 3.17 |
| Density | : 1.262 g/cm ³ (20 °C) |
| Water solubility | : soluble in cold water |
| Partition coefficient: n-octanol/water | : log Kow -2.6 |
| Auto-ignition temperature | : 400 °C |
| Thermal decomposition | : no data available |
| Viscosity, dynamic | : 1,300 mPa.s (20 °C) |
| Explosivity | : no data available |
| Oxidizing properties | : no data available |

9.2. Other information

No further information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No information available.

10.2. Chemical stability

Advice : No decomposition if stored and applied as directed.
No further information available.

10.3. Possibility of hazardous reactions

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Hazardous reactions : No information available.

10.4. Conditions to avoid

Conditions to avoid : No information available.

10.5. Incompatible materials

Materials to avoid : Oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition : Carbon oxides, acrolein products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Oral

LD50 Oral : > 2000 mg/kg (Rat)

Irritation

Eyes

Result : May irritate eyes.

Sensitisation

Result : No sensitizing effect known.

Further information

Other relevant toxicity information : Handle in accordance with good industrial hygiene and safety practice.

Experience with human exposure : Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Fish

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LC50 : > 5000 mg/l (fish; 96 h) (Toxicity to fish)

12.2. Persistence and degradability

Persistence and degradability

Biodegradability

Result : Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation

Result : Bioaccumulation is not expected.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Additional ecological information

Result : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

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.

SECTION 14: Transport information



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Not dangerous goods for ADR, RID, IMDG and IATA.

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.

SECTION 15: Regulatory information

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

15.2. Chemical Safety Assessment

no data available

SECTION 16: Other information

Further information

Key literature references and sources for data : Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Other information : The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements



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and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

|| Indicates updated section.