

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006**MONOPROPYLENE GLYCOL (ALL GRADES)**Version 3.0
Revision Date 2010/11/11

Print Date 2010/11/11

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

Trade name : MONOPROPYLENE GLYCOL (ALL GRADES)
CAS-No. : 57-55-6
EC-No. : 200-338-0

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.

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 : 0113 3879 200
Telefax : 0113 3879 280
E-mail address : msds@brenntag.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number (open 24 hours):
01865 407333 (N.C.E.C. Culham)

2. Hazards identification**2.1. Classification of the substance or mixture**

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

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

2.2. Label elements

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Labelling according to Regulation (EC) No 1272/2008

Additional information:

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

2.3. Other hazards

The product does not need to be labelled in accordance with EC directives or respective national laws.

3. Composition/information on ingredients

3.1. Substances

Chemical Name	Identification Number:	Amount [%]
Propane-1,2-diol	CAS-No.	: 57-55-6
	EC-No.	: 200-338-0
		> 99.5

4. First aid measures

4.1 Description of first aid measures

If inhaled : Move to fresh air.

In case of skin contact : Wash off with soap and water. Remove contaminated clothing and shoes.

In case of eye contact : Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids. If symptoms persist, call a physician.

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If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of immediate medical attention and special treatment needed

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : water spray
powder
Alcohol-resistant foam
Carbon dioxide (CO₂)

5.2. Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Strong heating may produce combustible vapours which can form explosive mixture with air.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Further information : Use water spray to cool unopened containers.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : For personal protection see section 8.

6.2 Environmental precautions

Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.

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6.3 Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Stop the leakage if it can be done without danger. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Provide for good ventilation. Mechanical ventilation can be needed.

Hygiene measures : Wash hands before breaks and immediately after handling the product. Smoking, eating and drinking should be prohibited in the application area.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed and dry. Product is hygroscopic. Protect against light. Keep away from sources of ignition - No smoking.

Requirements for storage areas and containers : Suitable materials for containers: Stainless steel Mild steel

Storage temperature : 18 - 32 °C

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7.3 Specific end uses

8. Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Engineering measures

Exposure may primarily be reduced by choice of working method and technical measures.

Personal protective equipment

Respiratory protection

Advice : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Advice : The exact break through time can be obtained from the protective glove producer and this has to be observed.
Protective gloves should be replaced at first signs of wear.

Material : Neoprene

Gloves : 240 min

Glove thickness : 0.5 mm

Eye protection

Advice : Safety goggles

Skin and body protection

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Advice : Wear suitable protective clothing.

Environmental exposure controls

General advice : The product should not be allowed to enter drains, water courses or the soil.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	: liquid
Colour	: colourless clear
Odour	: none
Odour Threshold pH	: : ca. 7
Freezing point	: -60 °C
Boiling point	: ca. 180 °C 1,013.25 hPa
Flash point	: ca. 109 °C closed cup
Upper explosion limit	: ca. 17 %(V)
Lower explosion limit	: ca. 2 %(V)
Vapour pressure	: ca. 0.1 hPa 20 °C
Relative vapour density	: ca. 2 15 - 20 °C
Density	: ca. 1.04 g/cm ³ 25 °C
Water solubility	: completely soluble

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Partition coefficient: n-octanol/water : -0.78
Ignition temperature : 371 °C
Viscosity, dynamic : ca. 46 mPa.s
25 °C

Oxidizing properties :

9.2 Other information

No further information available.

10. Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Advice : Stable

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid : Avoid moisture.
Exposure to sunlight.
Strong oxidizing agents
Avoid high temperatures.

10.5. Incompatible materials

Materials to avoid : Strong oxidizing agents
Acids
Isocyanates

10.6. Hazardous decomposition products

Hazardous decomposition products : Carbon monoxide
Toxic gases

11. Toxicological information

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11.1. Information on toxicological effects

CAS-No.
57-55-6

Acute toxicity

Oral

Value type : LD50
Value : 22,000 mg/kg
Species : rat
Remarks : This material may be a slight health hazard if ingested in large quantities.

Inhalation

Remarks : Inhalation of high concentration may cause mechanical overstraining of mucous membranes.

Dermal

Value type : LD50
Value : 20,800 mg/kg
Species : rabbit

Irritation

Skin

Remarks : Repeated exposure may cause skin dryness or cracking.

Eyes

Remarks : Splash in the eyes may cause discomfort.
Moderate eye irritation

Propane-1,2-diol

CAS-No.
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Acute toxicity

Oral

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Value type : LD50
Value : 20,000 mg/kg
Species : rat

Dermal

Value type : LD50
Value : 20,800 mg/kg
Species : rabbit

12. Ecological information

12.1. Toxicity

CAS-No.
57-55-6

Acute toxicity

Fish

Test type : Toxicity to fish
Species : Pimephales promelas
Exposure Time : 96 h
Value : 51,400 mg/l

Toxicity to daphnia and other aquatic invertebrates.

Test type : Toxicity to daphnia
Species : Daphnia
Exposure time : 48 h
Value type : EC50
Value : 43,500 mg/l

Propane-1,2-diol

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Acute toxicity

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Fish

Species : Oncorhynchus mykiss
Exposure Time : 96 h
Value type : LC50
Value : 45,716 mg/l

Toxicity to daphnia and other aquatic invertebrates.

Species : Daphnia magna
Exposure time : 48 h
Value type : EC50
Value : > 10,000 mg/l
Method : OECD Test Guideline 202

algae

Exposure time : 72 h
Value type : IC50
Value : 19,000 mg/l

Bacteria

Species : activated sludge
Value : > 5,000 mg/l

12.2. Persistence and degradability

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Persistence and degradability**Biodegradability**

Remarks : Readily biodegradable

12.3. Bioaccumulative potential

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12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

CAS-No. 57-55-6

Additional ecological information

Remarks : The product is mobile in water environment.
This product has no known eco-toxicological effects.

13. Disposal considerations

13.1. Waste treatment methods

Product : In accordance with local and national regulations.

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.

14. Transport information

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packaging group

14.5. Environmental hazards

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14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : not applicable

Further information for transport

Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

15. Regulatory information

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

15.2. Chemical Safety Assessment

16. Other information

|| Indicates updated section.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.