

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

1.1 Product identifier	
Trade name	1,2-Propanediol monomethyl ether acetate
Stock number:	L15459
CAS Number:	108-65-6
EC number:	203-603-9
Index number:	607-195-00-7
1.2 Relevant identified uses of the substance or mixture and uses advised against.	
Identified use:	SU24 Scientific research and development
1.3 Details of the supplier of the safety data sheet	
Manufacturer/Supplier:	Alfa Aesar GmbH & Co.KG A Johnson Matthey Company Zeppelinstr. 7b 76185 Karlsruhe / Germany Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300 Email: tech@alfa.com www.alfa.com
Informing department:	Product safety Tel + +049 (0) 7275 988687-0
1.4 Emergency telephone number:	Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number) Poison Information Center Mainz www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R10: Flammable.

Information concerning particular hazards for human and environment:

Not applicable

Other hazards that do not result in classification

No information known.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Hazard statements

Precautionary statements

The substance is classified and labelled according to the CLP regulation.

GHS02

Warning

H226 Flammable liquid and vapour.

P210

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241

Use explosion-proof electrical/ventilating/lighting/equipment.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P403+P235

Store in a well-ventilated place. Keep cool.

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

SECTION 3: Composition/information on ingredients**3.1 Substances**

CAS# Designation:

108-65-6 1,2-Propanediol monomethyl ether acetate

Identification number(s):

EC number:

203-603-9

Index number:

607-195-00-7

SECTION 4: First aid measures**4.1 Description of first aid measures**

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.

After swallowing

Rinse opened eye for several minutes under running water. Then consult doctor.

Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing agents

CO2, sand, extinguishing powder. Do not use water.

5.2 Special hazards arising from the substance or mixtureIf this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide**5.3 Advice for firefighters**

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

6.2 Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

Trade name 1,2-Propanediol monomethyl ether acetate

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6.3 Methods and material for containment and cleaning up:

Keep away from ignition sources.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Prevention of secondary hazards:

Keep away from ignition sources.

6.4 Reference to other sections

See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage
7.1 Precautions for safe handling

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities
Storage Requirements to be met by storerooms and containers:

No special requirements.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection
Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

8.1 Control parameters
Components with critical values that require monitoring at the workplace:
108-65-6 1,2-Propanediol monomethyl ether acetate (100,0%)

AGW (Germany) 270 mg/m³, 50 ppm
1(I);DFG, EU, Y

WEEL (USA) 50 ppm

Additional information:

No data

8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use breathing protection with high concentrations.

Protection of hands:

Check protective gloves prior to each use for their proper condition.

Material of gloves

Impervious gloves

Penetration time of glove material

Not determined

Eye protection:

Safety glasses

Body protection:

Face protection
Protective work clothing.

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties
General Information
Appearance:

Form: Liquid
Colour: Colourless
Smell: Ester-like
Odour threshold: Not determined.

pH-value (200 g/l) at 20 °C:

4

Change in condition

Melting point/Melting range: -67 °C
Boiling point/Boiling range: 145-146 °C
Sublimation temperature / start: Not determined

Flash point: 44 °C
Inflammability (solid, gaseous): Not applicable.
Ignition temperature: 315 °C
Decomposition temperature: Not determined
Self-inflammability: Not determined.

Critical values for explosion:

Lower: 1,5 Vol %
Upper: 10,8 Vol %

Steam pressure at 20 °C: 3,37 hPa

Density at 20 °C: 0,968 g/cm³

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with

Water at 20 °C: 220 g/l

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic at 20 °C: 1,2 mPas

kinematic: Not determined.

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity
10.1 Reactivity

No information known.

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DE/E

Safety data sheet
according to 1907/2006/EC, Article 31

Revision: 26.04.2011

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Trade name **1,2-Propanediol monomethyl ether acetate**

10.2 Chemical stability	Stable under recommended storage conditions.	(Contd. of page 2)
Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.	
10.3 Possibility of hazardous reactions	No dangerous reactions known	
10.5 Incompatible materials:	Oxidizing agents	
10.6 Hazardous decomposition products:	Carbon monoxide and carbon dioxide	

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute toxicity:	The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product.
LD/LC50 values that are relevant for classification:	
Oral LD50	8532 mg/kg (rat)
Skin irritation or corrosion:	May cause irritation
Eye irritation or corrosion:	May cause irritation
Sensitization:	No sensitizing effect known.
Germ cell mutagenicity:	No effects known.
Carcinogenicity:	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity:	No effects known.
Specific target organ system toxicity - repeated exposure:	No effects known.
Specific target organ system toxicity - single exposure:	No effects known.
Aspiration hazard:	No effects known.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.



SECTION 12: Ecological information

12.1 Toxicity	No further relevant information available.
Aquatic toxicity:	No further relevant information available.
12.2 Persistence and degradability	No further relevant information available.
12.3 Bioaccumulative potential	No further relevant information available.
12.4 Mobility in soil	No further relevant information available.
Additional ecological information:	
General notes:	Do not allow material to be released to the environment without proper governmental permits. Generally not hazardous for water. Avoid transfer into the environment.
12.5 Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
12.6 Other adverse effects	No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Recommendation	Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.
Uncleaned packagings:	
Recommendation:	Disposal must be made according to official regulations.

SECTION 14: Transport information

UN-Number	UN3272
ADR, IMDG, IATA	
14.2 UN proper shipping name	
ADR	3272 ESTERS, N.O.S. (1,2-Propanediol monomethyl ether acetate)
IMDG, IATA	ESTERS, N.O.S. (1,2-Propanediol monomethyl ether acetate)
14.3 Transport hazard class(es)	
ADR	
	
Class	3 (F1) Flammable liquids.
Label	3
IMDG, IATA	
	
Class	3 Flammable liquids.
Label	3
Packing group	III
ADR, IMDG, IATA	
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Flammable liquids.
Kemler Number:	30
EMS Number:	F-E,S-D
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC	
Code	Not applicable.
Transport/Additional information:	
ADR	
Excepted quantities (EQ):	E1
Limited quantities (LQ)	5L
Transport category	3
Tunnel restriction code	D/E
UN "Model Regulation":	UN3272, ESTERS, N.O.S. (1,2-Propanediol monomethyl ether acetate), 3, III

Trade name **1,2-Propanediol monomethyl ether acetate**

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SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Australian Inventory of Chemical**

Substance is listed.

Substances**Standard for the Uniform Scheduling of**

Substance is not listed.

Drugs and Poisons**National regulations****Information about limitation of use:**

For use only by technically qualified individuals.

Classification according to VbF:

A II

Technical instructions (air):

Class	Share in %
NK	100,0

Water hazard class:

Generally not hazardous for water.

Other regulations, limitations and prohibitive**regulations****ELINCS (European List of Notified Chemical****Substances)**

Substance is not listed.

Substances of very high concern (SVHC)**according to REACH, Article 57****REACH - Pre-registered substances**

Substance is not listed.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet:

Health, Safety and Environmental Department.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VbF: Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent