



Trade name: Methanol

Product no.: 000067-56-1

Status: 30.10.2007 Date of printing: 30.10.2007 Version: 2.1.5 / GB

1.) Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Trade name

Methanol

Use of the substance/preparation

Chemical processes general; paint solvents and thinners; chemical for the building industry; Solvent; synthetic product, chemical intermediate product

Company/undertaking identification

Address

HELM AG
Nordkanalstraße 28
D-20097 Hamburg

Telephone no. +49(0)40 / 2375-0

Fax no. +49(0)40 / 2375-1845

Information provided by / telephone

Telephone: +49(0)40 / 23750 Fax: +49(0)40 / 23751845

Emergency telephone

+49(0)551 / 19240 {Giftinformationszentrum Nord (GIZ-Nord)} (Service in english)

Advice on Safety Data Sheet

SDB@HELMAG.COM

2.) Hazards identification

Classification

F; R11 Highly flammable.
T; R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
T; R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

Hazard symbols

F Highly flammable
T Toxic

R phrases

11 Highly flammable.
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

3.) Composition / information on ingredients

Chemical characterization

methanol

Substance / product identification

Index no. 603-001-00-X

CAS no. 67-56-1

EC no. 200-659-6

4.) First aid measures

General information

Remove contaminated clothing immediately and dispose of safely. If the patient is likely to become unconscious, place and transport in stable sideways position.

After inhalation

Summon a doctor immediately. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with soap and water.

After eye contact

In case of contact with eyes rinse thoroughly with copious amounts of water and seek medical advice.

After ingestion

Seek medical attention. If necessary administer salt solution (2-3 tablespoons per 0.5 litres water). Not to apply to infants. Induce the patient to vomit of his own accord only if fully conscious.



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Advice to doctor**Symptoms**

Unconsciousness; Dizziness; Dizziness; Headache; Sensitivity to light

Hazards

Risk of circulatory collapse

5.) Fire-fighting measures**Suitable extinguishing media**

Alcohol-resistant foam; extinguishing powder; Water spray jet; Carbon dioxide

Extinguishing media that must not be used for safety reasons

Full water jet

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Fire gas of organic material has to be classed invariably as respiratory poison.

In the event of fire, the following can be released:

Carbon monoxide (CO)

Nitrogen oxides (NO_x)**Special protective equipment for fire-fighters**

Wear full protective suit. Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus.

Other information

Fire residues and contaminated firefighting water must be disposed off in accordance with the local regulations. Cool endangered containers with water spray jet. Apply foam in large quantities because some of it will be destroyed by the product.

6.) Accidental release measures**Personal precautions**

Keep away sources of ignition. Use personal protective clothing. Keep people away and stay on the upwind side.

Environmental precautions

Suppress gases/vapours/mists with water spray jet. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter drains or waterways.

Methods for cleaning up/taking up

Pick up with absorbent material. Suck off by room ventilation.

Additional informations (chapter 6)

Information regarding Waste Disposal, see chapter 13.

7.) Handling and storage**Handling****Advice on safe handling**

Open and handle container with care. Do not use for cleaning purposes. Provide good ventilation of working area (local exhaust ventilation if necessary).

Advice on protection against fire and explosion

Keep away from sources of ignition - refrain from smoking. Take precautionary measures against static charges.

Classification of fires

B

Storage**Requirements for storage rooms and vessels**

Prevent penetration into the ground. Keep only in the original container.

Advice on storage assembly

Do not store together with oxidizing agents.

Further information on storage conditions

Keep container tightly closed. Storage: cool and dry



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8.) Exposure controls / personal protection**Exposure limit values****methanol**

CAS no.	67-56-1
EC no.	200-659-6

Occupational Exposure Standards (OESs) / EH40

Methanol				
TWA	266	mg/m ³	200	ml/m ³
STEL	333	mg/m ³	250	ml/m ³
Skin resorption / sensibilisation	Sk			

2006/15/EG

Methanol				
TWA	260	mg/m ³	200	ml/m ³
Skin resorption / sensibilisation	Skin			

Personal protective equipment**Respiratory protection**

In case of insufficient ventilation or long-term effect use breathing apparatus. Self-contained breathing apparatus.

Hand protection

In case of intensive contact wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl			
Material thickness		0,6	- 0,8	mm
Breakthrough time	>	480		min.

Eye protection

Tightly fitting safety glasses (EN 166)

Skin protection

Light protective clothing

General protective and hygiene measures

Avoid contact with eyes and skin. Wash hands before breaks and after work. Keep separated from food-stuffs and feed-stocks. Keep away from foodstuffs and beverages. Remove soiled or soaked clothing immediately.

9.) Physical and chemical properties**General information**

Form	liquid
Colour	colourless
Odour	characteristic

Important health, safety and environmental information**Changes in physical state**

Type	Melting point	
Value	-98	°C
Type	Boiling point	
Value	65	°C

Flash point

Value	11	°C
Method	DIN 51755	

Ignition temperature

Value	455	°C
Method	DIN 51794	

Explosion limits

Upper explosion limit	36,5	% vol
Lower explosion limit	5,5	% vol

Vapour pressure

Value	128		hPa
Reference temperature	20	°C	

Density

Value	0,79		g/cm ³
Reference temperature	20	°C	

Viscosity

Value	0,55		cP
Reference temperature	20	°C	



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Solubility in water

Remarks miscible in all proportions

Octanol/water partition coefficient (log Pow)

Value -0,74

10.) Stability and reactivity**Conditions to avoid**

Reactions with oxidising agents. Formation of explosive gas/air mixtures.

Hazardous decomposition products

Formaldehyde

Thermal decomposition

Remarks No decomposition if used as prescribed.

11.) Toxicological information**Acute toxicity****Acute oral toxicity**

LD50 5628 mg/kg

Species rat

Acute dermal toxicity

Species rabbit 15800 mg/kg

Acute inhalational toxicity

LC50 64000 ppm

Species rat

Irritant/corrosive effects**Irritant effect on skin**Species rabbit
Evaluation Moderately irritating**Irritant effect on eyes**Species rabbit eye
Evaluation slightly irritant**Sensitisation**Species guinea pig
Evaluation Non-sensitizing**Effects after repeated or prolonged exposition (subacute, subchronic, chronic)****Mutagenicity**

Value No experimental information on genotoxicity in vivo available.

Reproduction toxicity

Remarks Indications of toxic effects are available from reproduction studies in animals.

Carcinogenicity

Value No indications of carcinogenic effects are available from long-term trials.

Experience in practiceInhalation causes headache/nausea.
Inhalation causes narcotic effect/intoxication.**12.) Ecological information****Ecotoxicity****Fish toxicity**

LC50 15500 mg/l

Species Lepomis macrochirus
Duration of exposure 96 h**Daphnia toxicity**

EC50 10000 mg/l

Species Daphnia magna
Duration of exposure 24 h
Method DIN 38412 Part 11**Algae toxicity**

EC50 3,6 mg/kg

Species Chlorella pyrenoidosa
Duration of exposure 10 d



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Bacteria toxicity

EC50 appr. 71 g/l
Species activated sludge

Persistence and degradability**Biodegradability**

Value 99 %
Method OECD 301 D

Other adverse effects

Product is not allowed to discharge into aquatic environment, drains or sewage treatment plants.

13.) Disposal considerations**Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

14.) Transport information**Land transport ADR/RID**

Class	3	Classification code	FT1
Packaging group	II		
Hazard id. no.	336		
Label	3+6.1		
UN number	1230		
Technical name	Methanol		

Marine transport IMDG

Class	3
Subsidiary-hazard	6.1
Packaging group	II
UN number	1230
Proper shipping name	Methanol
EmS	F-E, S-D
MARPOL	-
Label	3+6.1

Air transport ICAO/IATA

Class	3
Subsidiary-hazard	6.1
Packaging group	II
UN number	1230
Proper shipping name	Methanol
Label	3+6.1

15.) Regulatory information**Labelling in accordance with EC directives**

"EC-label"
EC no. 200-659-6 (methanol)

Hazard symbols

F Highly flammable
T Toxic

R phrases

11 Highly flammable.
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

S phrases

7 Keep container tightly closed.
16 Keep away from sources of ignition --- No smoking.
36/37 Wear suitable protective clothing and gloves.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks Anhang II Lfd.-Nr. 2



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National regulations**Other regulations, restrictions and prohibition regulations**

Work medicine Principles G10: "Methanol"

16.) Other information**Further information**

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The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation.

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC as amended in each case.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.