
MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product Name: METHANOL
Index -No: 603-001-00-X
CAS-No: 67-56-1
EC-No: 200-659-6
EU REACH- Reg No: 01-2119433307-44-XXXX
Brand: Solmedia Ltd

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture: See table in front of appendix for a complete overview of identified uses

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

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.
- Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
- Telephone: 0844 80 80 900
- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

Hazard Class	Hazard Category	Hazard Statements
Flammable liquids	Category 2	H225
Acute toxicity (Inhalation)	Category 3	H331
Acute toxicity (Dermal)	Category 3	H331
Acute toxicity (Oral)	Category 3	H301

Specific target organ toxicity - single exposure	Category 1	H370
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For the full text of the H-Statements mentioned in this Section, see Section 16

Most important adverse effects:

Human Health: See section 11 for toxicological information

Physical and chemical hazards: See section 9/10 for physicochemical information.

Potential environmental effects: See section 12 for environmental information

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard statements:

H225: Highly flammable liquid and vapour.

H301+H311+H331: Toxic if swallowed, in contact with skin or if inhaled.

H370: Causes damage to organs (Eyes, Central nervous system).

Signal words: Danger

Hazard pictograms:



Precautionary statements:

Prevention

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection

Response

P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Storage

P403+233+235: Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Hazardous components which must be listed on the label: Methanol

2.3 Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous ingredients Classification according to Regulation (EC) No. 1272/2008 [CLP]

			Classification (Regulation (EC) No 1272/2008 [CLP])	
Hazardous Components		Amount [%]	Hazard class/ Hazard category	Hazard Statements
Name:	Methanol	~99%	FLAM. LIQ. CAT. 2; AUTE OX. CAT. 3; STOT SE CAT.1.	H225
CAS NO.	67-56-1			H331
EC-NO.	200-659-6			H311
EU REACH NO.	01-211943307-44-XXXX			H301 H370

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:	First aider needs to protect themselves! Remove from exposure, lie down. Take off all contaminated clothing immediately. Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.
Skin contact:	Wash off immediately with soap and plenty of water. Obtain medical attention.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible
Ingestion:	Rinse mouth with water. Never give anything by mouth to an unconscious person. Keep patient warm and at rest. If a person vomits when lying on his back, place him in the recovery position. Call a physician immediately
Inhalation:	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Oxygen, if needed. No artificial respiration, mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

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

Effects: Risk of blindness! 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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Highly flammable, The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixtures with air. Flash back possible over considerable distance.

Hazardous combustion products: Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit).

Further advice: Cool closed containers exposed to fire with water spray. Heating will cause a pressure rise - with risk of bursting. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Keep people away from and upwind of spill/leak. Provide adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin and eyes. Do not breathe vapours or spray mist. In case of inadequate ventilation wear respiratory protection.

6.2 Environmental precautions

Environmental precautions:

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

6.3 Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up:

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

See Section 1 for emergency contact information.

See Section 8 for information on personal protective equipment.

See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Keep container tightly closed. Provide sufficient air exchange and/or exhaust in work rooms. Use personal protective equipment. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity. Use respirator with appropriate filter if vapours or aerosol are released. Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. Smoking eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Store in a place accessible by authorized persons only. Keep in an area equipped with solvent resistant flooring. Suitable materials for containers: Stainless steel; Mild steel; Unsuitable materials for containers: Lead; Aluminium; Zinc; polystyrene

Advice on protection against fire and explosion: Combustible liquid. Keep away from sources of ignition - No smoking. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Take measures to prevent the build-up of electrostatic charge. Use only in an area containing explosion proof equipment.

Further information on storage conditions: Keep tightly closed in a dry and cool place. Keep in a well-ventilated place.

Advice on common storage: Keep away from food, drink and animal feeding stuffs. Do not store together with oxidizing and self-igniting products.

7.3 Specific end use(s)

Specific use(s)	Identified use: See table in front of appendix for a complete overview of identified uses.
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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Component	Methanol	CAS-No 67-56-1
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Derived No Effect Level (DNEL) Derived Minimal Effect Level (DMEL)

DNEL	Workers, Acute - systemic effects, Skin contact	: 40 mg/kg bw/day
DNEL	Workers, Acute - systemic effects, Inhalation	: 260 mg/m ³
DNEL	Workers, Acute - local effects, Inhalation	: 260 mg/m ³
DNEL	Workers, Long-term - systemic effects, Skin contact	: 40 mg/kg bw/day
DNEL	Workers, Long-term - systemic effects, Inhalation	: 260 mg/m ³
DNEL	Workers, Long-term - local effects, Inhalation	: 260 mg/m ³
DNEL	Consumers, Acute - systemic effects, Skin contact	: 8 mg/kg bw/day
DNEL	Consumers, Acute - systemic effects, Inhalation	: 50 mg/m ³
DNEL	Consumers, Acute - systemic effects, Ingestion	: 8 mg/kg bw/day
DNEL	Consumers, Long-term - local effects, Inhalation	: 50 mg/m ³
DNEL	Consumers, Long-term - systemic effects, Ingestion	: 8 mg/kg bw/day
DNEL	Consumers, Long-term - systemic effects, Inhalation	: 50 mg/m ³
DNEL	Consumers, Long-term - systemic effects, Skin contact	: 8 mg/kg bw/day
DNEL	Consumers, Acute - local effects, Inhalation	: 50 mg/m ³

Predicted No Effect Concentration (PNEC)

Fresh water	: 154 mg/l
Marine water	: 15.4 mg/l
Sediment	: 570.4 mg/kg dry weight (d.w.)
Soil	: 23.5 mg/kg ww
Sewage treatment plant (STP)	: 100 mg/l
Intermittent releases	: 1540 mg/l

Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), Time Weighted Average (TWA): 200 ppm, 266 mg/m³

UK. EH40 Workplace Exposure Limits (WELs), Skin designation: Can be absorbed through the skin.

UK. EH40 Workplace Exposure Limits (WELs), Short Term Exposure Limit (STEL): 250 ppm, 333 mg/m³

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC
2009/161/EU, 2017/164/EU, Time Weighted Average (TWA): 200 ppm, 260 mg/m³
Indicative

ELV (IE), Time Weighted Average (TWA): 200 ppm, 260 mg/m³ Indicative OELV

ELV (IE), Skin designation: Can be absorbed through the skin

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Advice

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique

(Without touching glove's outer surface) to avoid skin contact with this product. Dispose of

Contaminated gloves after use in accordance with applicable laws and good laboratory practices.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

Material: Nitrile
Break through time <1hr
Material: butyl-rubber
Break through time: >= 8 h
Glove thickness: 0.5 mm
Material: fluorocarbon rubber
Break through time: >= 4 h
Glove thickness: 0.4 mm
Material: polychloroprene
Break through time: >= 1 h
Glove thickness: 0.5 mm

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection required if workplace exposure limits cannot be controlled/if ventilation or exhaust is not adequate. For nuisance exposures use type OV/AG (US) or type ABEK

(EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Respiratory protection complying with EN 141. Recommended Filter type:AX In case of intensive or longer exposure use self-contained breathing apparatus.

Eye protection:

Goggles recommended during refilling: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Additional Information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Control of environmental exposure

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

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

Form:	liquid
Colour:	colourless
Odour:	alcohol-like
Odour Threshold:	Not applicable
pH :	Not applicable
Melting point/range:	-97.8 °C
Boiling point/boiling range:	64.7 °C
Flash point:	9.7 °C (Method: closed cup)
Evaporation rate:	no data available
Flammability (solid, gas):	Not applicable
Upper explosion limit:	38.5 %(V) (50 °C)

CMR Effects	
Carcinogenicity	Animal testing did not show any carcinogenic effects.
Mutagenicity	In vitro tests did not show mutagenic effects
	In vivo tests did not show mutagenic effects
Teratogenicity	Not classified due to data which are conclusive although insufficient
Reproductive toxicity	Not classified due to data which are conclusive although insufficient
Genotoxicity in vivo	
	negative (in vivo assay; Mammalian-Animal)
Teratogenicity	
NOAEL Teratog	1.3 mg/L (Rat)
NOAEL Teratog	2.39 mg/L (Monkey)
Reproductive toxicity	
NOAEL Parent	1.33 mg/L (Rat)

Specific Target Organ Toxicity	
Single exposure	Target Organs: Eyes, Central nervous system Causes damage to organs. Experience with human exposure
Repeated exposure	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Other toxic properties	
Repeated dose toxicity	LOAEL: 2340 mg/kg bw/day(Monkey, male)(Oral) (No guideline available)Subacute toxicity
	NOAEL: 1.06 mg/l (Rat)(Inhalation)
Aspiration hazard	No aspiration toxicity classification,

12.1 Toxicity

Component	Methanol	CAS-No 67-56-1
Acute toxicity		
Fish	LC50	15400 mg/l (Lepomis macrochirus; 96 h) (flow-through test; EPA 600/3-75/009)
Toxicity to daphnia and other aquatic invertebrates	EC50	> 1000 mg/l (Daphnia magna (Water flea); 48 h) (OECD Test Guideline 202)
algae	EC50	22000 mg/l (Pseudokirchneriella subcapitata (green algae); 96 h)
Bacteria	EC50	20000 mg/l (Bacteria; 15 h)

12.2 Persistence and degradability

CAS-No 67-56-1

12.3 Bioaccumulative potential

BCF: < 10 The product has low potential bioaccumulation

The product is mobile in water environment.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Do not allow undiluted product or large quantities of it to reach sewage system or water bodies

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: Dispose of contaminated packaging in the same way as the product. In accordance with local and national regulations. Do not burn, or use a cutting torch on, the empty drum. Risk of explosion.

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.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

14.1 UN number

1230

14.2 UN proper shipping name

ADR: METHANOL
RID: METHANOL
IMDG: METHANOL

14.3 Transport hazard class(es)

ADR-Class (Labels; Classification Code; Hazard identification No; Tunnel restriction code) : 3 3, 6.1; FT1; 336; (D/E)

RID-Class (Labels; Classification Code; Hazard identification No) : 3 3, 6.1; FT1; 336

IMDG-Class (Labels; EmS) : 3 3, 6.1; F-E, S-D

14.4 Packaging group

ADR: II
RID: II
IMDG: II

14.5 Environmental hazards

Environmentally hazardous according to ADR: no
Environmentally hazardous according to RID: no
Marine Pollutant according to IMDG-Code: no

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

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC) - Not listed

EU. REACH Annex XIV, Substances Subject to Authorization - Not listed;

Component	Methanol	CAS-No 67-56-1
	EU. Regulation EU No. 649/2012 concerning the export and import of dangerous chemicals - The substance/mixture does not fall under this legislation.	
	EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC) Point Nos.: , 3; Listed Point Nos.: , 40; Listed Point Nos.: , 69; Listed	
	EU. Regulation No. 1223/2009 on cosmetic products, Annex III: List of Restricted Substances in Cosmetic Products: Maximum concentration in ready for use preparation: 5 %; Denaturant for ethanol and isopropyl alcohol; See the text of the regulation for applicable exceptions or provisions	
	EU. Directive 2012/18/EU (SEVESO III) Annex I: 2012/18/EU : Lower-tier requirements: 500 tonnes; Part 2: Named dangerous substances : Upper-tier requirements: 5,000 tonnes; Part 2: Named dangerous substances	
	WGK (DE) : WGK 1: slightly water endangering: 145; Classification source is Annex 2. WGK 2: water endangering: 145; Second classification is a KBwS decision.	

Notification status methanol:

Regulatory List	Notification	Notification number
AICS	YES	
DSL	YES	
EINECS	YES	200-659-6
ENCS (JP)	YES	(2)-201
IECSC	YES	
ISHL (JP)	YES	(2)-201
JEX (JP)	YES	(2)-201

KECI (KR)	YES	97-1-80
KECI (KR)	YES	KE-23193
NZIOC	YES	HSR001186
PICCS (PH)	YES	
TSCA	YES	

15.2 Chemical safety assessment

A chemical safety assessment has been carried out for this substance.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H225 Highly flammable liquid and vapour.
 H301 Toxic if swallowed.
 H311 Toxic in contact with skin.
 H331 Toxic if inhaled.
 H370 Causes damage to organs.

Abbreviations and Acronyms

BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
PBT	persistent, bioaccumulative and toxic
PNEC	predicted no-effect concentration
STOT	specific target organ toxicity
SVHC	substance of very high concern

UVCB substance of unknown or variable composition, complex reaction products or biological materials
vPvB very persistent and very bioaccumulative

Other 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.

Methods used for product classification: The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data. Hints for trainings: The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.

Further information

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.