

SAFETY DATA SHEET
METHANOL

Revision 1

27/04/23

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

1.1. Product identifier

Product name METHANOL
Product number 0369
REACH registration number 01-2119433307-44-xxxx
CAS number 67-56-1
EU index number 603-001-00-X
EC number 200-659-6

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

Identified uses Manufacture of substance Distribution of substance Formulation and (re)packing of substances and mixtures Use as a fuel. Use in cleaning agents Laboratories Oil field drilling and production operations Wastewater treatment chemical.

1.3. Details of the supplier of the safety data sheet

Supplier

Worcestershire Chemicals Ltd
Unit 6 Oakdale Trading Estate
Ham Lane, Kingswinford
DY6 7JY
Tel: 01562 755884
Email: info@chemi-kal.co.uk
www.chemi-kal.co.uk

1.4. Emergency telephone number

Emergency telephone 0870 190 6777 (National Chemical Emergency Centre) +44 (0)1270 502891

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225
Health hazards Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370
Environmental hazards Not Classified

2.2. Label elements

EC number 200-659-6

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Hazard pictograms



Signal word

Danger

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.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P309 IF exposed or if you feel unwell:
P313 Get medical advice/ attention.

2.3. Other hazards

No further information given.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name	METHANOL
REACH registration number	01-2119433307-44-xxxx
EU index number	603-001-00-X
CAS number	67-56-1
EC number	200-659-6

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Never give anything by mouth to an unconscious person.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention.
Ingestion	Rinse mouth thoroughly with water. Get medical attention immediately. Induce vomiting, if person is conscious. Administer salt solution if necessary (2-3 tablespoons per 0.5 litres of water).
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

General information	Risk of circulatory collapse.
Inhalation	Vapours may cause drowsiness and dizziness. Headache. Unconsciousness.

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

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Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog. Water spray, fog or mist.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards The product is highly flammable. Heating may generate flammable vapours. Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Vapours may form explosive mixtures with air. Vapours may be ignited by a spark, a hot surface or an ember. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

5.3. Advice for firefighters

Protective actions during firefighting Keep up-wind to avoid fumes. Fight fire from safe distance or protected location. Move containers from fire area if it can be done without risk. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. Do not use water jet as an extinguisher, as this will spread the fire. Ventilate closed spaces before entering them. Risk of re-ignition after fire has been extinguished.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Avoid or minimise the creation of any environmental contamination. Never use water by itself on spillage; this will spread the spill and cause further contamination. Avoid discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Wash thoroughly after dealing with a spillage. Eliminate all sources of ignition. Provide adequate ventilation. If leakage cannot be stopped, evacuate area. Cover large spillages with alcohol-resistant foam. Contain and absorb spillage with sand, earth or other non-combustible material. Inform authorities if large amounts are involved. Spillage may be stored as chemical waste in approved area.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Storage tanks and other containers must be earthed. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Contaminated rags and cloths must be put in fireproof containers for disposal. Remove contamination with soap and water or recognised skin cleansing agent. Do not eat, drink or smoke when using the product. Container must be kept tightly closed when not in use. Do not use in confined spaces without adequate ventilation and/or respirator. Protect against direct sunlight.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Keep container tightly closed. Keep away from oxidising materials, heat and flames. Earth container and transfer equipment to eliminate sparks from static electricity. Keep away from food, drink and animal feeding stuffs. Keep only in the original container.

Storage class

Flammable liquid storage.

7.3. Specific end use(s)

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

DNEL

Industry - Dermal; Short term systemic effects: 40 mg/kg/day

Industry - Dermal; Long term systemic effects: 40 mg/kg/day

Industry - Inhalation; Short term systemic effects: 260 mg/m³

Industry - Inhalation; Short term local effects: 260 mg/m³

Industry - Inhalation; Long term systemic effects: 260 mg/m³

Industry - Inhalation; Long term local effects: 260 mg/m³

Consumer - Oral; Short term systemic effects: 8 mg/kg/day

Consumer - Dermal; Short term systemic effects: 8 mg/kg/day

Consumer - Inhalation; Short term systemic effects: 50 mg/m³

PNEC

- Fresh water; 154 mg/l

- marine water; 15.4 mg/l

- Soil; 23.5 mg/kg

- STP; 100 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Use explosion-proof general and local exhaust ventilation.

Eye/face protection

Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Use barrier creams to prevent skin contact. Provide eyewash station and safety shower. Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated. Eating, smoking and water fountains prohibited in immediate work area. Do not smoke in work area.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Check that the respirator fits tightly and the filter is changed regularly.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Alcoholic.
Melting point	-97°C
Initial boiling point and range	64°C
Flash point	9°C Closed cup.
Evaporation rate	5.90
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 6 Upper flammable/explosive limit: 36.5
Vapour pressure	12.90 kPa @ 20°C
Vapour density	1.11
Relative density	0.79 - 0.80 @ 20°C
Solubility(ies)	Miscible with water.
Partition coefficient	: -0.70
Auto-ignition temperature	470°C

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No information available.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None at ambient temperatures. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,187.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 17,100.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 128.2

Species Rat

ATE inhalation (vapours mg/l) 128.2

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

Respiratory sensitisation Guinea pig: Not sensitising.

Skin sensitisation

Skin sensitisation - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro : Negative.

Genotoxicity - in vivo : Negative.

Carcinogenicity

Carcinogenicity Not available.

Reproductive toxicity

Reproductive toxicity - fertility - NOAEC 1.33 mg/l, , Rat Suspected reproductive toxicant based on limited evidence.

Specific target organ toxicity - single exposure

STOT - single exposure Not available.

Specific target organ toxicity - repeated exposure

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STOT - repeated exposure Not available.

Aspiration hazard

Aspiration hazard No information available.

General information Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. Overexposure may depress the central nervous system, causing dizziness and intoxication.

Ingestion Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact Irritation of eyes and mucous membranes.

Acute and chronic health hazards Prolonged contact may cause dryness of the skin. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Central and/or peripheral nervous system damage. Brain damage.

Route of exposure Ingestion. Inhalation

Target organs Brain Respiratory system, lungs Mucous membranes

Medical symptoms Skin irritation. Irritation of eyes and mucous membranes. Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting.

Medical considerations Skin disorders and allergies. Convulsions. Central nervous system depression. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 15400 mg/l, *Lepomis macrochirus* (Bluegill)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 10000 mg/l, *Daphnia magna*

Acute toxicity - aquatic plants EC₅₀, 96 hours: ~ 22000 mg/l, *Pseudokirchneriella subcapitata*.

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product has low potential for bioaccumulation.

Partition coefficient : -0.70

12.4. Mobility in soil

Mobility The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

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Results of PBT and vPvB assessment No information available

12.6. Other adverse effects

Other adverse effects Do not discharge to the aquatic environment, drains or sewage treatment plants.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Confirm disposal procedures with environmental engineer and local regulations. Uncleaned empty packages should be disposed of in the same manner as the contents. Do not allow runoff to sewer, waterway or ground.

Waste class EWC NUMBER: Allocation of a waste code number in accordance with the European Waste Catalogue, should be carried out in agreement with an EA authorised waste disposal company.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1230

UN No. (IMDG) 1230

UN No. (ICAO) 1230

UN No. (ADN) 1230

14.2. UN proper shipping name

Proper shipping name (ADR/RID) METHANOL

Proper shipping name (IMDG) METHANOL

Proper shipping name (ICAO) METHANOL

Proper shipping name (ADN) METHANOL

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID subsidiary risk 6.1

ADR/RID classification code FT1

ADR/RID label 3

IMDG class 3

IMDG subsidiary risk 6.1

ICAO class/division 3

ICAO subsidiary risk 6.1

ADN class 3

ADN subsidiary risk 6.1

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Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Emergency Action Code	•2WE
Hazard Identification Number (ADR/RID)	336
Tunnel restriction code	(D/E)

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

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Regulation (EC) No 1272/2008 CLP. Regulation (EC) No 1907/2006 REACH.
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

Inventories

US - TSCA

Present.

SECTION 16: Other information

General information	Only trained personnel should use this material. Since empty containers retain product residue, follow label warnings, even after container is emptied. For further Health and Safety information contact: Health and Safety Officer. Labels should not be removed from containers until they have been cleaned and no product remains within.
Revision comments	Updated company address.
Issued by	Compliance Department
Revision date	16/10/2018

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Revision	8
Supersedes date	29/06/2016
SDS number	0369
SDS status	Approved.
Hazard statements in full	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.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.