



SAFETY DATA SHEET

Section 1: Identification of the Substance/Mixture and of the Supplier

Product Name: Methanol
Proper Shipping Name Methanol
Recommended use: Solvent, fuel, feedstock
Company Details Marketing Chemicals Ltd
Address: 2 Rymer Place, Mangere Bridge
Auckland. New Zealand
Telephone: +64 9 634 3862 [8.00 am to 4.30pm – Monday to Friday]
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Emergency Telephone: +64 274 736008(24 hours)
National Poison Centre(24 hours): 0800 POISON [764 766]
Date of preparation 2 November 2014

Section 2: Hazard Identification



DANGER:

- Highly flammable liquid and vapour.
- Toxic if swallowed.
- Toxic in contact with skin.
- Toxic if inhaled.
- Causes serious eye irritation.
- Suspected of damaging fertility or the unborn child.
- Causes damage to organs through repeated or prolonged exposure.
- Harmful to terrestrial vertebrates

HSNO Approval Number: Group Standard HSR001186

HSNO Classes: 3.1B, 6.1C(oral, dermal, inhalation), 6.4A, 6.8B, 6.9A, 9.3C

Prevention Statements:

- Keep out of reach of children.
- Read label before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.

- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe vapours.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective gloves and protective eye/face protection.
- Use personal protection equipment as required.

Response Statements

- If medical advice is needed, have product container or label at hand.
- IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
- Rinse mouth.
- IF ON SKIN: Wash with plenty of soap and water.
- Call a POISON CENTRE or doctor if you feel unwell.
- Take off immediately all contaminated clothing.
- IF exposed: Call a POISON CENTRE or doctor.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTRE or doctor.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice.
- If exposed or concerned: Get medical advice.
- In case of fire: Use water fog, mist, or alcohol-resistant foam.

Storage Statements

- Store in well-ventilated place. Keep cool.
- Store locked up.

Section 3: Composition/Information on Ingredients

Name	% by Wt.	CAS Number
Methanol	99 – 100	67-56-1

Section 4: First Aid Measures

NOTES TO PHYSICIAN: Acute exposure to methanol through either ingestion or inhalation of high concentrations can result in symptoms appearing between 40 minutes and 72 hours following exposure. Symptoms/signs are usually limited to the central nervous system (CNS), eyes, and gastrointestinal tract. Initial CNS effects (headache, vertigo, lethargy, confusion) may give the impression of ethanol intoxication. Blurred vision, decreased acuity (ability to see, hear, and understand) and photophobia (visual intolerance to light) are also common. Treatment with IPECAC or lavage is indicated for any patient presenting within 2 hours of ingestion. A profound metabolic acidosis occurs in severe poisoning and serum bicarbonate levels are a more accurate measure of severity than serum methanol levels. Ethanol significantly decreases the toxicity of methanol because it competes for the same metabolic enzymes.

Eyes:	Hold eyes open and rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do after the first 5 minutes. Continue rinsing for at least 15 minutes. Get medical attention if irritation persists.
Skin:	Remove immediately all contaminated clothing and footwear. Wash affected area with plenty of water followed by soap and water. Get medical advice if irritation persists. Wash contaminated clothing/footwear before re-use.
Ingestion:	Do NOT induce vomiting. Call a Poison Centre or doctor immediately for advice. Do Not DELAY. Swallowing methanol is potentially life threatening. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs.
Inhalation:	Move person to fresh air and keep warm and at rest. Call a Poison Centre or doctor immediately for advice. If breathing is difficult, give oxygen.

For Further Information Telephone (24 Hours)The National Poison Centre: 0800 Poison [764 766]

Section 5: Fire Fighting Measures

Flash Point:	11°C
Auto ignition Temperature:	464°C
Flammable Limits in Air % by Volume:	6.0 to 36.5
Extinguishing Media:	Use dry chemical powder, carbon dioxide, or water spray. For large fires use alcohol resistant foam. Do NOT use water in a jet.
Fire Fighting Instructions:	Vapours can accumulate in confined spaces resulting in toxicity and flammability hazards. Vapours can flow along surfaces to distant ignition sources and flash back. Closed containers may rupture violently and suddenly release large quantities of product. Cool fire exposed containers with water spray. Concentrations of >25% methanol in water can be ignited.
Unusual Fire and Explosion Hazards:	Methanol vapours may burn with an invisible or clear flame. Toxic gases and vapours may be generated; carbon monoxide, carbon dioxide, formaldehyde.

Section 6: Accidental Release Measures

SPILLS: Highly flammable liquid. Can burn without visible flame. Vapor forms explosive mixture with air. Isolate hazard area and keep unnecessary and unprotected people away from area. Stay upwind and keep out of low-lying areas. Wear personal protective equipment. Avoid contact with skin and eyes. Shut off leak if safe to do so. Remove or isolate ignition sources. Contain spill. Avoid run off into drains or sewers. Do not contaminate watercourses or the ground. Take precautions against static discharge. Bound or ground (earth) all equipment. Ventilate contaminated area.

For large spills (more than a drum), recover liquid and transfer by mechanical means to labeled salvage tank that can be sealed for recovery or disposal of product. Allow residues to evaporate. Water can be used to disperse vapors and to clean spill area although prevent water from entering sewers or drains. Remove any contaminated soil and dispose of safely by waste management company

For small spills, absorb with an appropriate material, e.g. vermiculite, and dispose of waste safely in a labelled sealed container for recovery or disposal.

Section 7: Handling And Storage

Handling & Storage:

Read label before use. Use only in well-ventilated areas. Avoid breathing vapors or direct contact with product. Wear personal protective equipment. Remove ignition sources. Avoid sparks. Electrostatic charge may be generated during pumping with risk of fire. Restrict line viscosity to avoid generation of electrostatic discharge. Take precautions to use bonded or grounded (earthed) equipment. No Smoking. Do not use compressed air for filling, discharging or handling. Use only in well-ventilated area. Keep container closed when not in use. Wear personal protective equipment to prevent breathing of and contact with product. Wear gloves and protect eyes from splashes. Wash hands and exposed skin after handling.

Ensure all storage areas have adequate fire-fighting equipment. Store in closed original container in a secure cool dry well-ventilated place, away from sunlight, ignition sources, heat, incompatible substances, aerosols, other flammables, oxidizing agents, and corrosives, out of reach of children, and away from food, drink, and animal foodstuffs.

Take precautions to avoid accumulation of vapors in pits and confined spaces. All equipment must be grounded/bonded when transferring product to avoid static discharge. Ensure all ignition sources eliminated or purge storage tanks with inert gas such as nitrogen. Anhydrous methanol is non-corrosive to most metals at ambient temperatures except for lead, nickel, monel, cast iron and high silicon iron. Coatings of copper (or copper alloys), zinc (including galvanized steel) or aluminium are unsuitable for storage. Polyethylene, neoprene, phenolic resins, polyesters, natural rubber, butyl rubber, and polyvinyl chloride (unplasticised) shown more resistance to corrosion by methanol.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use only in a well-ventilated area. If airborne concentrations unknown or exceed exposure limits, wear respiratory protective equipment. Where air-filtering respirators are unsuitable (e.g. air-borne concentrations are high, risk or oxygen deficiency, confined space) use positive pressure breathing apparatus.

Eye / Face Protection:

Where there is potential for eye contact, wear a face shield, chemical goggles, and have eye-flushing equipment immediately available.

Body Protection:

PVC-coated gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn.

Respiratory Protection:

Avoid breathing vapour or mist. Use NIOSH approved respiratory protection equipment appropriate to the material

Exposure Limits:

WES-TWA=200ppm(262mg/m³); WES-STEL=250ppm(328mg/m³)

Section 9: Physical And Chemical Properties

Appearance	Liquid
Boiling point °C	64.7
Specific Gravity	0.82
Vapour Pressure (kPa@20°C)	12.8
Vapour Density (air=1 @15°C)	1.105
Solubility in water	Completely

pH	Not applicable
Evaporation Rate (nBuAc=1)	4.1
Flash point(closed cup- °C	11°C
Boiling point-°C	64.7

Section 10: Stability And Reactivity

Stability of the Substance:	Stable under normal storage and use conditions.
Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources.
Materials to avoid:	Strong oxidizing agents, strong mineral or organic acids, and strong bases. Contact may result in a violent or explosive reaction. Corrosive to lead, aluminium, magnesium and platinum. May react with metallic aluminium or magnesium and generate hydrogen gas. May attack some forms of plastic, rubber and coatings.
Hazardous Decomposition Products:	
Conditions Contributing to Hazardous Polymerization	Not known

Section 11: Toxicological Information

Eyes:	Mild to moderate irritant to eyes. Symptoms can include tearing, redness, and burning.
Skin:	Toxic. May be absorbed through skin resulting in harmful effects as described for inhalation route of exposure. Prolonged contact may also result in defatting of skin leading to dermatitis and aggravation of any pre-existing skin conditions.
Ingestion:	SPECIES: Human ;ENDPOINT: LD50 ;VALUE: 300 mg/kg Toxic. Ingestion of even small amounts could potentially cause blindness and death. Symptoms/signs are usually limited to the central nervous system (CNS), eyes, and gastrointestinal tract. Effects of sub lethal do can be nausea, headache, abdominal pain, vomiting and visual disturbances. Initial CNS effects (headache, vertigo, lethargy, confusion) may give the impression of ethanol intoxication. Blurred vision, decreased acuity (ability to see, hear, and understand) and photophobia (visual intolerance to light) are common.
Inhalation:	Toxic. May irritate the upper respiratory tract, cause headaches, drowsiness, nausea, confusion, and loss of consciousness, gastrointestinal and visual disturbances. Odor threshold is several times higher than the WES concentration. Exposure to high concentration may cause permanent effects, unconsciousness, and death.

Section 12: Ecological Information

SPECIES: Mouse ; ENDPOINT: LD50 ;VALUE: 870 mg/kg

Section 13: Disposal Considerations

Recover and recycle (e.g. re-distillation) product whenever possible. Dispose of waste in accordance with Regional Authority or local council bylaws. Options may include via sewerage treatment facility (limitations on water-diluted concentration would apply) or via incineration.

Section 14: Transport Information



UN No: 1230
Proper Shipping Name: Methanol
Dangerous Goods Class: 3
Subsidiary risk: 6.1
Packing Group: II
Hazchem Code: 2[W]E

Section 15: Regulatory Information

HSNO Approval No: Group Standard HSR001186
Group Standard: Methanol
HSNO Classes: 3.1B, 6.1C(oral, dermal, inhalation), 6.4A, 6.8B, 6.9A, 9.3C

Section 16: Other Information

New Zealand National Poison Information Centre (24 hours): 0800 POISON [764 766]
New Zealand Emergency Services: 111

For General Information: John Crombie, Manager, Marketing Chemicals Ltd,
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Marketing Chemicals Ltd has taken care in compiling this information. No liability is accepted directly or indirectly from its application as conditions of use are outside the Company's control. End users are obliged to conform to relevant Local Government regulations.

End of Safety Data Sheet.