# SAFETY DATA SHEET
# METHYL ISOBUTYL CARBINOL
# REVISION 3, DATE 16 JUN 23

## 1. IDENTIFICATION

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|---|---|
| **Product Name** | **Methyl Isobutyl Carbinol** |
| **Other Names** | 4-methylpentan-2-ol; Methylisobutyl carbinol; MIBC |
| **Uses** | Industrial solvent. Used in lubricants, in oil and gas field drilling and production operations, used in laboratories, in paints, in mining, functional fluids, polymer processing, coatings, for wafer cleaning in the electronics industry, as a solvent in coating products in semiconductor industry. |
| **Chemical Family** | No Data Available |
| **Chemical Formula** | C6H14O |
| **Chemical Name** | 2-Pentanol, 4-methyl- |
| **Product Description** | No Data Available |

### Contact Details of the Supplier of this Safety Data Sheet

| Organisation | Location | Telephone |
|---|---|---|
| Redox Ltd | 2 Swettenham Road<br>Minto NSW 2566<br>Australia | +61-2-97333000 |
| Redox Ltd | 11 Mayo Road<br>Wiri Auckland 2104<br>New Zealand | +64-9-2506222 |
| Redox Inc. | 3960 Paramount Boulevard<br>Suite 107<br>Lakewood CA 90712<br>USA | +1-424-675-3200 |
| Redox Chemicals Sdn Bhd | Level 2, No. 8, Jalan Sapir 33/7<br>Seksyen 33, Shah Alam Premier Industrial Park<br>40400 Shah Alam<br>Sengalor, Malaysia | +60-3-5614-2111 |

### Emergency Contact Details

*For emergencies only; DO NOT contact these companies for general product advice.*

| Organisation | Location | Telephone |
|---|---|---|
| Poisons Information Centre | Westmead NSW | 1800-251525<br>131126 |
| Chemcall | Australia | 1800-127406<br>+64-4-9179888 |
| Chemcall | Malaysia | +64-4-9179888 |
| Chemcall | New Zealand | 0800-243622<br>+64-4-9179888 |
| National Poisons Centre | New Zealand | 0800-764766 |
| CHEMTREC | USA & Canada | 1-800-424-9300 CN723420<br>+1-703-527-3887 |

## 2. HAZARD IDENTIFICATION

**Poisons Schedule (Aust)** Not Scheduled

## Globally Harmonised System

**Hazard Classification** Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

**Hazard Categories**

Flammable Liquids - Category 3

Serious Eye Damage/Irritation - Category 2A

Specific Target Organ Toxicity (Single Exposure) - Category 3

**Pictograms**

**Signal Word** Warning

**Hazard Statements**

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|---|---|
| **H226** | Flammable liquid and vapour. |
| **H319** | Causes serious eye irritation. |
| **H335** | May cause respiratory irritation. |
| **AUH066** | Repeated exposure may cause skin dryness or cracking |

**Precautionary Statements**

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|---|---|---|
| Prevention | **P210** | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | **P280** | Wear protective gloves/protective clothing/eye protection/face protection. |
| | **P261** | Avoid breathing mist/vapours/spray. |
| | **P240** | Ground and bond container and receiving equipment. |
| | **P241** | Use explosion-proof electrical/ventilating/lighting and all other equipment. |
| | **P242** | Use non-sparking tools. |
| | **P243** | Take action to prevent static discharges. |
| | **P271** | Use only outdoors or in a well-ventilated area. |
| Response | **P370 + P378** | In case of fire: Alcohol resistant foam is the preferred fire-fighting medium but, if it is not available, normal foam can be used. |
| | **P337 + P313** | If eye irritation persists: Get medical advice. |
| | **P312** | Call a POISON CENTER or doctor if you feel unwell. |
| | **P303 + P361 + P353** | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| | **P305 + P351 + P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | **P304 + P340** | IF INHALED: Remove victim to fresh air and keep comfortable for breathing. |
| Storage | **P403 + P233** | Store in a well-ventilated place. Keep container tightly closed. |
| | **P403 + P235** | Store in a well-ventilated place. Keep cool. |
| | **P405** | Store locked up. |
| Disposal | **P501** | Dispose of contents/container in accordance with local / regional / national / international regulations. |

## National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification** Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Environmental Protection Authority (New Zealand)**
Hazardous Substances and New Organisms Amendment Act 2015

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|---|---|---|---|
| **HSNO Classifications** | Health Hazards | **6.1C** | Substances that are acutely toxic- Toxic |

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

***Ingredients***

| Chemical Entity | Formula | CAS Number | Proportion |
|---|---|---|---|
| Methylisobutyl carbinol | C6H14O | 108-11-2 | >=99 - 100 % |

## 4. FIRST AID MEASURES

***Description of necessary measures according to routes of exposure***

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| **Swallowed** | IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a Poison Centre or doctor/physician for advice. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Never give anything by mouth to an unconscious person. |
| **Eye** | IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.<br>*Removal of contact lenses after an eye injury should only be undertaken by skilled personal. |
| **Skin** | IF ON SKIN (or hair): Remove and isolate contaminated clothing and shoes. Immediately flush skin and hair with running water (and soap, if available) for at least 15 minutes. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.<br>*In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. |
| **Inhaled** | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor/physician for advice. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. |
| **Advice to Doctor** | Treat symptomatically and supportively. Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.<br>*Most important symptoms and effects, both acute and delayed: Can cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness; Blood disorders; Dermatitis; Blurred vision. |
| **Medical Conditions Aggravated by Exposure** | Skin contact may aggravate existing skin disease. Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. |

## 5. FIRE FIGHTING MEASURES

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| **General Measures** | Clear fire area of all non-emergency personnel. If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out - Beware of re-ignition! |
| **Flammability Conditions** | FLAMMABLE LIQUID & VAPOUR: Will be easily ignited by heat, sparks or flames. |
| **Extinguishing Media** | Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction - Do not use water jets. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used.<br>*CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient. |

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| **Fire and Explosion Hazard** | Risk of violent reaction or explosion! Vapours will form explosive mixtures with air. Vapours will travel to source of ignition and flash back. Most vapours are heavier than air and will collect in low or confined areas. Vapour explosion hazard indoors, outdoors or in sewers! Many liquids are lighter than water. Containers may explode when heated. |
| **Hazardous Products of Combustion** | Fire will produce irritating, corrosive and/or toxic gases, including Carbon oxides, organic vapours. |
| **Special Fire Fighting Instructions** | Contain runoff from fire control or dilution water - Runoff may cause pollution. Runoff to sewer may create fire or explosion hazard! Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities. |
| **Personal Protective Equipment** | Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. |
| **Flash Point** | 40.5 - 41 °C [Closed cup] |
| **Lower Explosion Limit** | 1.0 % |
| **Upper Explosion Limit** | 5.5 % |
| **Auto Ignition Temperature** | 305 °C |
| **Hazchem Code** | •3Y |

## 6. ACCIDENTAL RELEASE MEASURES

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| **General Response Procedure** | Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used in handling the product must be earthed. Do not touch or walk through spilled material. Clear spills immediately! Avoid breathing vapours and contact with eyes, skin and clothing. |
| **Clean Up Procedures** | Absorb or cover with dry earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material and transfer to containers for disposal (see SECTION 13). |
| **Containment** | Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Dike far ahead of large spill for later disposal.<br>*Vapour-suppressing foam may be used to control vapours. Water spray may reduce vapour, but may not prevent ignition in closed spaces. |
| **Decontamination** | Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. |
| **Environmental Precautionary Measures** | Spillages and decontamination runoff should be prevented from entering drains and watercourses. Local authorities should be advised if significant spillages cannot be contained. |
| **Evacuation Criteria** | Spill or leak area should be isolated immediately. Keep upwind and to higher ground. Keep unauthorised personnel away.<br>*Large spill: Immediately contact Police or Fire Brigade; Consider initial downwind evacuation of areas within at least 300 m. |
| **Personal Precautionary Measures** | Use personal protective equipment as required (see SECTION 8). |

## 7. HANDLING AND STORAGE

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| **Handling** | Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation - Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Avoid formation of aerosols. Prevent vapour accumulation. Avoid breathing mist/vapours and contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). FLAMMABLE LIQUID & VAPOUR: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment and non-sparking tools. Take precautionary measures against static discharge. Do NOT use compressed air for filling, discharging or handling operations. |
| **Storage** | Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10). Store locked up. Ensure that all local regulations regarding handling and storage facilities are followed. |

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| **Container** | Keep in the original container or suitable material, i.e. Stainless steel; Carbon steel. Unsuitable material(s): Plastic materials; Aluminium if >50°C.<br>*Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers. |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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|---|---|
| **General** | For Methyl isobutyl carbinol (CAS No. 108-11-2):<br>- Safe Work Australia Exposure Standard: TWA = 25 ppm (104 mg/m3); STEL = 40 ppm (167 mg/m3); Absorption through the skin may be a significant source of exposure (Sk).<br>- New Zealand Workplace Exposure Standard [Next review 2023]: TWA = 25 ppm (104 mg/m3); STEL = 40 ppm (167 mg/m3); Skin absorption (skin).<br>- NIOSH REL: TWA = 25 ppm (100 mg/m3); STEL = 40 ppm (165 mg/m3) [skin].<br>- OSHA PEL: TWA = 25 ppm (100 mg/m3) [skin].<br>- Immediately dangerous to life or health (IDLH) concentration: 400 ppm. |
| **Exposure Limits** | No Data Available |
| **Biological Limits** | No information available. |
| **Engineering Measures** | A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.<br>*Use an explosion proof exhaust ventilation system. |
| **Personal Protection Equipment** | - Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Respirator with filter for organic vapour; Full-face supplied air respirator for high or unknown exposures (refer to AS/NZS 1715 & 1716).<br>- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Tightly fitting safety goggles; Wear full face shield if splashes are likely to occur (refer to AS/NZS 1715 & 1716).<br>- Hand protection: Wear protective gloves. Recommended: Impervious gloves, e.g. Butyl rubber; Nitrile rubber (refer to AS/NZS 2161.1).<br>- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Choose body protection according to the amount and concentration of the hazardous substance(s) at the work place. For prolonged or repeated exposures use impervious clothing over parts of the body subject to exposure.<br>*Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use. |
| **Special Hazards Precaustions** | The vapour is heavier than air. Beware of accumulation in pits and confined spaces. |
| **Work Hygienic Practices** | Do not eat, drink or smoke when using this product. Always wash hands after handling the material and before eating, drinking and/or smoking. Use clean, well-maintained personal protection equipment. Remove and wash contaminated clothing. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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| **Physical State** | Liquid |
| **Appearance** | Clear liquid |
| **Odour** | Mild to pungent, alcohol-like |
| **Colour** | Colourless |
| **pH** | No Data Available |
| **Vapour Pressure** | 0.42 kPa (@ 20 °C) |
| **Relative Vapour Density** | 3.5 Air = 1 |
| **Boiling Point** | 131 - 133 °C |
| **Melting Point** | No Data Available |
| **Freezing Point** | -90 °C |

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| **Solubility** | Moderately soluble in water (1.6% at 20°C) |
| **Specific Gravity** | 0.805 - 0.810 |
| **Flash Point** | 40.5 - 41 °C [Closed cup] |
| **Auto Ignition Temp** | 305 °C |
| **Evaporation Rate** | 0.28 (nBuAc = 1) |
| **Bulk Density** | No Data Available |
| **Corrosion Rate** | No Data Available |
| **Decomposition Temperature** | No Data Available |
| **Density** | No Data Available |
| **Specific Heat** | No Data Available |
| **Molecular Weight** | 102.17 g/mol |
| **Net Propellant Weight** | No Data Available |
| **Octanol Water Coefficient** | 1.68 log Kow (at 20°C) |
| **Particle Size** | No Data Available |
| **Partition Coefficient** | No Data Available |
| **Saturated Vapour Concentration** | No Data Available |
| **Vapour Temperature** | No Data Available |
| **Viscosity** | 5.2 mPa.s (@ 20 °C) |
| **Volatile Percent** | No Data Available |
| **VOC Volume** | No Data Available |
| **Additional Characteristics** | No information available. |
| **Potential for Dust Explosion** | Not applicable. |
| **Fast or Intensely Burning Characteristics** | Risk of violent reaction or explosion! |
| **Flame Propagation or Burning Rate of Solid Materials** | No information available. |
| **Non-Flammables That Could Contribute Unusual Hazards to a Fire** | CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient. |
| **Properties That May Initiate or Contribute to Fire Intensity** | FLAMMABLE LIQUID & VAPOUR: Will be easily ignited by heat, sparks or flames. May become electrostatically charged. |
| **Reactions That Release Gases or Vapours** | Fire/decomposition will produce irritating, corrosive and/or toxic gases, including Carbon oxides, organic vapours. |
| **Release of Invisible Flammable Vapours and Gases** | Vapours will form explosive mixtures with air. Vapour explosion hazard indoors, outdoors or in sewers! |

## 10. STABILITY AND REACTIVITY

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| **General Information** | No hazardous reaction is expected when handled and stored according to provisions. |
| **Chemical Stability** | Stable under normal conditions. |
| **Conditions to Avoid** | Prevent vapour accumulation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Take precautionary measures against static discharge. |
| **Materials to Avoid** | Incompatible/reactive with strong oxidising agents, acid catalysts ((sulphuric acid, hydrochloric acid, oxalic acid), Iodine, bases, Acetic anhydride, Hydrogen peroxide (concentrated solutions). |
| **Hazardous Decomposition Products** | Fire/decomposition will produce irritating, corrosive and/or toxic gases, including Carbon oxides, organic vapours. |
| **Hazardous Polymerisation** | No information available. |

## 11. TOXICOLOGICAL INFORMATION

**General Information**

- Acute toxicity: May be harmful if swallowed and if inhaled. The chemical exhibited typical organic solvent effects in rats following acute inhalation exposure with anaesthetic effects occurring at high vapour concentrations.
- Skin corrosion/irritation: Can cause moderate skin irritation.
- Eye damage/irritation: Causes serious eye irritation.
- Respiratory/skin sensitisation: No sensitising effects known.
- Germ cell mutagenicity: Not considered to be genotoxic. Non mutagenic (Ames test).
- Carcinogenicity: Not considered to be carcinogenic. No indications for a carcinogenic potential.
- Reproductive toxicity: Not expected to be a specific reproductive or developmental toxin. No adverse effect on reproduction (Rat).
- STOT (single exposure): May cause respiratory irritation. Can cause central nervous system depression, Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
- STOT (repeated exposure): Following repeated application of the chemical, severe drying of the skin with some sloughing and cracking could occur.
- Aspiration toxicity: No information available.

***Acute***

**Ingestion**

Acute toxicity (Oral):
- LD50, Rat: 2,590 mg/kg bw. [Supplier's SDS].
- LD50, Rat: 2,950 mg/kg bw. [Supplier's SDS].

**Other**

Acute toxicity (Dermal):
- LD50, Rabbit: 2,870 mg/kg bw. [Supplier's SDS].
- LD50, Rabbit: >3,870 ml/kg bw. [Supplier's SDS].

**Inhalation**

Acute toxicity (Inhalation):
- LC50, Rat: 16 mg/L (4 h) [Supplier's SDS].
- LC50, Rat (male/female): >16,000 mg/m3 (4 h) [ECHA].

*One female rat exposed to 16,000 mg/m3 died at termination of exposure.

**Carcinogen Category**

None

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Aquatic toxicity:
- LC50, Fish (Pimephales promelas): 92.4 mg/L (96 h) [Supplier's SDS].
- EC50, Crustacea (Daphnia magna): 337 mg/L (48 h) [Supplier's SDS].
- ErC50, Algae/aquatic plants (Pseudokirchneriella subcapitata): 334 mg/L (96 h) [Supplier's SDS].

Toxicity to microorganisms:
- EC50, Sewage (domestic): >100 mg/L (3 h) [Supplier's SDS].

**Persistence/Degradability**

Readily biodegradable (85 %, 28 d) [Supplier's SDS].

**Mobility**

Very low potential for geo-accumulation.
*log Koc: <3

**Environmental Fate**

Harmful to aquatic life - Discharge into environment must be avoided.

**Bioaccumulation Potential**

Very low potential for bioaccumulation.
*Bioconcentration factor: 0.5

**Environmental Impact**

No Data Available

## 13. DISPOSAL CONSIDERATIONS

**General Information**

Recover or recycle, if possible. Waste product should not be allowed to contaminate soil or water. Disposal should be in accordance with applicable regional, national, and local laws and regulations. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
*It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

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| **Special Precautions for Land Fill** | Contaminated packaging: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to drum recoverer or metal reclaimer. |

## 14. TRANSPORT INFORMATION

### Land Transport (Australia)
ADG Code

| | |
|---|---|
| **Proper Shipping Name** | METHYL ISOBUTYL CARBINOL |
| **Class** | 3 Flammable Liquids |
| **Subsidiary Risk(s)** | No Data Available |
| **EPG** | 17 Liquids - Flammable, Toxic |
| **UN Number** | 2053 |
| **Hazchem** | •3Y |
| **Pack Group** | III |
| **Special Provision** | No Data Available |

### Land Transport (Malaysia)
ADR Code

| | |
|---|---|
| **Proper Shipping Name** | METHYL ISOBUTYL CARBINOL |
| **Class** | 3 Flammable Liquids |
| **Subsidiary Risk(s)** | No Data Available |
| **EPG** | 17 Liquids - Flammable, Toxic |
| **UN Number** | 2053 |
| **Hazchem** | •3Y |
| **Pack Group** | III |
| **Special Provision** | No Data Available |

### Land Transport (New Zealand)
NZS5433

| | |
|---|---|
| **Proper Shipping Name** | METHYL ISOBUTYL CARBINOL |
| **Class** | 3 Flammable Liquids |
| **Subsidiary Risk(s)** | No Data Available |
| **EPG** | 17 Liquids - Flammable, Toxic |
| **UN Number** | 2053 |
| **Hazchem** | •3Y |
| **Pack Group** | III |
| **Special Provision** | No Data Available |

### Land Transport (United States of America)
US DOT

| | |
|---|---|
| **Proper Shipping Name** | METHYL ISOBUTYL CARBINOL |
| **Class** | 3 Flammable Liquids |
| **Subsidiary Risk(s)** | No Data Available |
| **ERG** | 129 Flammable Liquids (Polar / Water-Miscible / Noxious) |

| | |
|---|---|
| **UN Number** | 2053 |
| **Hazchem** | •3Y |
| **Pack Group** | III |
| **Special Provision** | No Data Available |

### Sea Transport
IMDG Code

| | |
|---|---|
| **Proper Shipping Name** | METHYL ISOBUTYL CARBINOL |
| **Class** | 3 Flammable Liquids |
| **Subsidiary Risk(s)** | No Data Available |
| **UN Number** | 2053 |
| **Hazchem** | •3Y |
| **Pack Group** | III |
| **Special Provision** | No Data Available |
| **EMS** | F-E, S-D |
| **Marine Pollutant** | No |

### Air Transport
IATA DGR

| | |
|---|---|
| **Proper Shipping Name** | METHYL ISOBUTYL CARBINOL |
| **Class** | 3 Flammable Liquids |
| **Subsidiary Risk(s)** | No Data Available |
| **UN Number** | 2053 |
| **Hazchem** | •3Y |
| **Pack Group** | III |
| **Special Provision** | No Data Available |

### National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

| | |
|---|---|
| **Dangerous Goods Classification** | Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) |

## 15. REGULATORY INFORMATION

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|---|---|
| **General Information** | No Data Available |
| **Poisons Schedule (Aust)** | Not Scheduled |

### Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

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|---|---|
| **Approval Code** | HSR001193 |

### National/Regional Inventories

| | |
|---|---|
| **Australia (AIIC)** | Listed |

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|---|---|
| **Canada (DSL)** | Not Determined |
| **Canada (NDSL)** | Not Determined |
| **China (IECSC)** | Not Determined |
| **Europe (EINECS)** | 203-551-7 |
| **Europe (REACh)** | Not Determined |
| **Japan (ENCS/METI)** | Not Determined |
| **Korea (KECI)** | Not Determined |
| **Malaysia (EHS Register)** | Not Determined |
| **New Zealand (NZIoC)** | Listed |
| **Philippines (PICCS)** | Not Determined |
| **Switzerland (Giftliste 1)** | Not Determined |
| **Switzerland (Inventory of Notified Substances)** | Not Determined |
| **Taiwan (NCSR)** | Not Determined |
| **USA (TSCA)** | Not Determined |

## 16. OTHER INFORMATION

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|---|---|
| **Related Product Codes** | MEISCA1015, MEISCA1020, MEISCA1025, MEISCA1030, MEISCA1035, MEISCA1040, MEISCA1041, MEISCA1044, MEISCA1048, MEISCA1049, MEISCA1053, MEISCA1054, MEISCA1057, MEISCA1070, MEISCA1400, MEISCA1410, MEISCA1420, MEISCA1500, MEISCA1510, MEISCA1520, MEISCA2010, MEISCA2020, MEISCA2095, MEISCA7000, MEISCA7010, MEISCA8300, MEISCA8310, MEISCA8320 |
| **Revision** | 3 |
| **Revision Date** | 16 Jun 2023 |
| **Reason for Issue** | Updated SDS |
| **Key/Legend** | < Less Than<br>> Greater Than<br>**AICS** Australian Inventory of Chemical Substances<br>**atm** Atmosphere<br>**CAS** Chemical Abstracts Service (Registry Number)<br>**$cm^2$** Square Centimetres<br>**CO2** Carbon Dioxide<br>**COD** Chemical Oxygen Demand<br>**deg C (°C)** Degrees Celcius<br>**EPA (New Zealand)** Environmental Protection Authority of New Zealand<br>**deg F (°F)** Degrees Farenheit<br>**g** Grams<br>**$g/cm^3$** Grams per Cubic Centimetre<br>**g/l** Grams per Litre<br>**HSNO** Hazardous Substance and New Organism<br>**IDLH** Immediately Dangerous to Life and Health<br>**immiscible** Liquids are insoluable in each other.<br>**inHg** Inch of Mercury<br>**inH2O** Inch of Water<br>**K** Kelvin<br>**kg** Kilogram |

**kg/m$^3$** Kilograms per Cubic Metre
**lb** Pound
**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
**ltr** or **L** Litre
**m$^3$** Cubic Metre
**mbar** Millibar
**mg** Milligram
**mg/24H** Milligrams per 24 Hours
**mg/kg** Milligrams per Kilogram
**mg/m$^3$** Milligrams per Cubic Metre
**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.
**mm** Millimetre
**mmH2O** Millimetres of Water
**mPa.s** Millipascals per Second
**N/A** Not Applicable
**NIOSH** National Institute for Occupational Safety and Health
**NOHSC** National Occupational Heath and Safety Commission
**OECD** Organisation for Economic Co-operation and Development
**Oz** Ounce
**PEL** Permissible Exposure Limit
**Pa** Pascal
**ppb** Parts per Billion
**ppm** Parts per Million
**ppm/2h** Parts per Million per 2 Hours
**ppm/6h** Parts per Million per 6 Hours
**psi** Pounds per Square Inch
**R** Rankine
**RCP** Reciprocal Calculation Procedure
**STEL** Short Term Exposure Limit
**TLV** Threshold Limit Value
**tne** Tonne
**TWA** Time Weighted Average
**ug/24H** Micrograms per 24 Hours
**UN** United Nations
**wt** Weight