

# SAFETY DATA SHEET

FOR INDUSTRIAL USE ONLY

**Methanol**

## Section 1. Identification

**Product name** : Methanol  
**MSDS Number** : 000000108579  
**Chemical name** : Not available  
**Other means of identification** : Methanol BMT  
**Product type** : Alcohol.  
**Material uses** : Solvent(s)

**Manufacturer/Supplier/Importer** : Hexion Pty Ltd  
Level 4, 13-15 Lake St.  
3023 Caroline Springs  
Victoria Australia.

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1300 666 368

**Emergency telephone number** : 1800 033 111 / +61 3 9663 2130

## Section 2. Hazards identification

\* This product is classified in accordance to Australian regulation - GHS V3, and ADG Code.

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 2  
ACUTE TOXICITY:oral - Category 3  
ACUTE TOXICITY:dermal - Category 3  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

### GHS label elements

**Signal word** : DANGER  
**Hazard statements** : Highly flammable liquid and vapor.  
Toxic if swallowed or in contact with skin.  
Causes serious eye irritation.  
Causes damage to organs:  
May cause respiratory irritation.  
May cause damage to organs through prolonged or repeated exposure.

**Symbol** : 

### Precautionary statements

- Prevention** :
- Wear protective gloves.
  - Wear eye or face protection.
  - Wear protective clothing.
  - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
  - Use only non-sparking tools.
  - Take precautionary measures against static discharge.
  - Keep container tightly closed.
  - Use only outdoors or in a well-ventilated area.
  - Do not breathe vapor.
  - Do not eat, drink or smoke when using this product.
  - Wash hands thoroughly after handling.
- Response** :
- Get medical attention if you feel unwell.
  - IF exposed:
  - Call a POISON CENTER or physician.
  - IF INHALED:**
  - Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - Call a POISON CENTER or physician if you feel unwell.
  - IF SWALLOWED:**
  - Immediately call a POISON CENTER or physician.
  - Rinse mouth.
  - IF ON SKIN (or hair):**
  - Take off immediately all contaminated clothing.
  - Rinse skin with water or shower.
  - IF ON SKIN:**
  - Wash with plenty of soap and water.
  - Call a POISON CENTER or physician if you feel unwell.
  - 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 attention.
- Storage** :
- Store locked up.
  - Store in a well-ventilated place.
  - Keep cool.
- Disposal** :
- Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other hazards which do not result in classification** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Substance  
**Chemical name** : Not available  
**Other means of identification** : Methanol BMT

**CAS number/other identifiers**

**CAS number** : Not available  
**EC number** : Not available

Hazardous ingredient name	% by weight	CAS number
Methanol	99.85	67-56-1

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

**Description of necessary first aid measures**

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician.

**Most important symptoms/effects, acute and delayed****Potential acute health effects**

<b>Inhalation</b>	:	May cause respiratory irritation.
<b>Ingestion</b>	:	Toxic if swallowed.
<b>Skin contact</b>	:	Toxic in contact with skin.
<b>Eye contact</b>	:	Causes serious eye irritation.

**Over-exposure signs/symptoms**

<b>Inhalation</b>	:	Adverse symptoms may include the following: respiratory tract irritation coughing
<b>Ingestion</b>	:	No specific data.
<b>Skin</b>	:	No specific data.
<b>Eyes</b>	:	Adverse symptoms may include the following: pain or irritation watering redness

**Indication of immediate medical attention and special treatment needed, if necessary**

<b>Specific treatments</b>	:	No specific treatment.
<b>Notes to physician</b>	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Protection of first aid personnel</b>	:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

<b>Section 5. Fire-fighting measures</b>
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**Extinguishing media**

<b>Suitable</b>	:	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Not suitable</b>	:	Do not use water jet.
<b>Specific hazards arising from the chemical</b>	:	Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
<b>Hazardous thermal decomposition products</b>	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide
<b>Special precautions for fire-fighters</b>	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

<b>Special protective equipment for fire-fighters</b>	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>Remark</b>	:	Not available
<b>Hazchem code</b>	:	HAZCHEM: 2WE

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- |                                    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>For non-emergency personnel</b> | : | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| <b>For emergency responders</b>    | : | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".                                                                                                                                                                                                                                                                     |
| <b>Environmental precautions</b>   | : | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).                                                                                                                                                                                                                                                       |

### Methods and material for containment and cleaning up

- |                    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Small spill</b> | : | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Large spill</b> | : | Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13 of SDS). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal. |

## Section 7. Handling and storage

### Precautions for safe handling

- |                            |   |                                                                                                                                                                                                                                                                               |
|----------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Protective measures</b> | : | Put on appropriate personal protective equipment (see section 8 of SDS). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter |
|----------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Methanol	NOHSC (1995-05-01) Short Term Exposure Limit (STEL) 328 mg/m <sup>3</sup> 250 ppm Time Weighted Average (TWA) 262 mg/m <sup>3</sup> 200 ppm

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical

products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid
- Color** : Colorless/Colourless
- Odor** : characteristic.
- Odor threshold** : Not available
- pH** : Not determined
- Melting point** : Approx. -98 °C (-144 °F)
- Boiling point** : Approx. 64.5 °C (148.1 °F)
- Flash point** : 6 °C (43 °F)
- Burning rate** : Not available
- Burning time** : Not available
- Evaporation rate** : Not available
- Flammability (solid, gas)** : Not available
- Lower and upper explosive (flammable) limits** : **Lower:** Not available  
**Upper:** Not available

<b>Vapor pressure</b>	:	Approx. 125 hPa @ 20 °C (68 °F)
<b>Vapor density</b>	:	Approx. 1.1 [Air = 1]
<b>Relative density</b>	:	0.791 - 0.801
<b>Solubility</b>	:	Not available
<b>Solubility in water</b>	:	Miscible
<b>Partition coefficient: n-octanol/water</b>	:	Not available
<b>Auto-ignition temperature</b>	:	440 °C (824 °F)
<b>Decomposition temperature</b>	:	Not available
<b>SADT</b>	:	
<b>Viscosity</b>	:	<b>Dynamic:</b> Not available

**Kinematic:** Not available

#### Other information

No additional information.

## Section 10. Stability and reactivity

<b>Chemical stability</b>	:	The product is stable.
<b>Possibility of hazardous reactions</b>	:	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
<b>Incompatible materials</b>	:	Reactive or incompatible with the following materials: oxidizing materials
<b>Hazardous decomposition products</b>	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on the likely routes of exposure

<b>Inhalation</b>	:	May cause respiratory irritation.
<b>Ingestion</b>	:	Toxic if swallowed.
<b>Skin contact</b>	:	Toxic in contact with skin.
<b>Eye contact</b>	:	Causes serious eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	:	Adverse symptoms may include the following: respiratory tract irritation coughing
<b>Ingestion</b>	:	No specific data.
<b>Skin contact</b>	:	No specific data.
<b>Eye contact</b>	:	Adverse symptoms may include the following: pain or irritation

watering  
redness

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Methanol				
	LD50 Oral	Rat	5,628 mg/kg	-

**Conclusion/Summary** : Not available

**Irritation/Corrosion**

**Conclusion/Summary**

**Skin** : Not available

**eyes** : Not available

**Respiratory** : Not available

**Sensitization**

**Conclusion/Summary**

**Skin** : Not available

**Respiratory** : Not available

**Potential chronic health effects**

**General** : May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Chronic toxicity**

**Conclusion/Summary** : Not available

**Carcinogenicity**

**Conclusion/Summary** : Not available

**Mutagenicity**

**Conclusion/Summary** : Not available

**Teratogenicity**

**Conclusion/Summary** : Not available

**Reproductive toxicity**

**Conclusion/Summary** : Not available

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
Methanol	Category 3 Category 1 Category 2 Category 3 Category 1 Category 2		Respiratory tract irritation central nervous system (CNS) optic nerve Respiratory tract irritation central nervous system (CNS) optic nerve

**Specific target organ toxicity (repeated exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
Methanol	Category 2		kidneys liver gastrointestinal tract skin respiratory tract kidneys liver gastrointestinal tract skin respiratory tract

**Numerical measures of toxicity****Acute toxicity estimates**

<b>Route</b>	<b>ATE value</b>
Oral	100.2 mg/kg
<b>Route</b>	<b>ATE value</b>
Dermal	300.5 mg/kg

**Other information** : Not available

**Section 12. Ecological information****Aquatic and terrestrial toxicity**

Product/ingredient name	Result	Species	Exposure
Methanol	Acute EC50 13,000 mg/l Fresh water	Fish - Rainbow trout,donaldson trout	4 d

**Conclusion/Summary** : Not available

**Persistence/degradability**

**Conclusion/Summary** : Not available

**Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Methanol	-0.77	-	low

### Mobility in soil

Soil/water partition coefficient (KOC) : Not available  
 Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

Regulatory information	UN/NA number	Proper shipping name	Classes/Packing group
ADG	1230	METHANOL	3 (6.1) II
ADR	1230	METHANOL	3 (6.1) II
ICAO/IATA	1230	METHANOL	3 (6.1) II
IMO/IMDG	1230	METHANOL	3 (6.1) II

**Emergency Action Code** : HAZCHEM: 2WE

**ERG Number** : 16

## Section 15. Regulatory information

### Standard Uniform Schedule of Medicine and Poisons

Version: 2.0

Date of issue/Date of revision: 28.11.2016

Date of previous issue: 27.03.2015

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**Control of Scheduled Carcinogenic Substances**

Not available

**Australia inventory (AICS)** : All components are listed or exempted.**International regulations**

**International lists** :

- Canada inventory All components are listed or exempted.
- Japan inventory All components are listed or exempted.
- China inventory (IECSC) All components are listed or exempted.
- Korea inventory All components are listed or exempted.
- New Zealand Inventory (NZIoC) All components are listed or exempted.
- Philippines inventory (PICCS) All components are listed or exempted.
- United States inventory (TSCA 8b) All components are listed or exempted.
- Taiwan inventory (CSNN) All components are listed or exempted.

**Section 16. Other information****History**

**Date of printing** : 14.12.2016  
**Date of issue/Date of revision** : 28.11.2016  
**Date of previous issue** : 27.03.2015  
**Version** : 2.0  
**Key to abbreviations** :

- ADG = Australian Dangerous Goods
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- UN = United Nations

**References** : Not available

**Notice to reader**

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