

# SAFETY DATA SHEET



Revision date: 24-Aug-2021

Revision Number 5

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### Product identifier

**Product Name** SODIUM METHOXIDE 30% SOLUTION IN METHANOL

**Product Code(s)** 000000050038

### Other means of identification

**UN number** 1289

### Recommended use of the chemical and restrictions on use

**Recommended use** Catalyst.

**Uses advised against** No information available.

### Supplier

Ixom Operations Pty Ltd  
ABN: 51 600 546 512  
Level 8, 1 Nicholson Street  
Melbourne 3000  
Australia

Telephone Number: +61 3 9906 3000

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

### GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

<b>Flammable liquids</b>	Category 3
<b>Acute toxicity - Oral</b>	Category 3
<b>Acute toxicity - Dermal</b>	Category 3
<b>Acute toxicity - Inhalation (Vapors)</b>	Category 3
<b>Skin corrosion/irritation</b>	Category 1 Sub-category B
<b>Serious eye damage/eye irritation</b>	Category 1
<b>Specific target organ toxicity (single exposure)</b>	Category 1

### **SIGNAL WORD**

Danger

**Label elements**

Flame  
Corrosion  
Skull and crossbones  
Health hazard



**Hazard statements**

H226 - Flammable liquid and vapor  
H301 - Toxic if swallowed  
H311 - Toxic in contact with skin  
H331 - Toxic if inhaled  
H314 - Causes severe skin burns and eye damage  
H370 - Causes damage to organs

**Precautionary Statements - Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Do not breathe fume, gas, mist, vapours, spray  
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  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Wear protective gloves / protective clothing / eye protection / face protection

**Precautionary Statements - Response**

Specific treatment (see First aid on this SDS)  
IF exposed: Call a POISON CENTER or doctor/physician  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN: Wash with plenty of soap and water  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Call a POISON CENTER or doctor/physician if you feel unwell  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth  
Do NOT induce vomiting  
In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet for extinction.

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed  
Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**Other hazards which do not result in classification**

AUH014 - Reacts violently with water

**General Hazards**

Poisons Schedule (SUSMP) 6

**3. COMPOSITION/INFORMATION ON INGREDIENTS**Mixture

Chemical name	CAS No.	Weight-%
Methanol (methyl alcohol)	67-56-1	70%
Methanol, sodium salt	124-41-4	30%

**4. FIRST AID MEASURES**Description of first aid measures

<b>General advice</b>	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
<b>Emergency telephone number</b>	Poisons Information Center, Australia: 13 11 26 Poisons Information Center, New Zealand: 0800 764 766
<b>Inhalation</b>	If exposed or concerned: Get medical advice/attention. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Immediate medical attention is required. 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. If breathing is difficult, (trained personnel should) give oxygen.
<b>Eye contact</b>	Do not rub affected area. Keep eye wide open while rinsing. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical advice/attention.
<b>Skin contact</b>	Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Ingestion</b>	Get immediate medical advice/attention. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.
<b>Self-protection of the first aider</b>	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. 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. Do not breathe vapor or mist. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Irritation/Corrosion. May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing. Vapors may cause drowsiness and dizziness.
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Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically. Can cause corneal burns. Metabolic acidosis may occur up to 12 hours after ingestion. Administration of ethanol reduces toxic effects by blocking the metabolic route to formaldehyde/formic acid production in the body.
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## 5. FIRE FIGHTING MEASURES

### Suitable Extinguishing Media

**Suitable Extinguishing Media** Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray or water fog can be used.

**Unsuitable extinguishing media** High volume water jet.

### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Sealed containers may rupture when heated. Most vapors are heavier than air. Vapors may spread along ground and collect in low or confined areas (sewers, basements, tanks). Pay attention to flashback.

**Hazardous combustion products** Carbon oxides. Formaldehyde.

### Special protective actions for fire-fighters

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**Hazchem code** •2WE

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Ensure adequate ventilation. Avoid contact with skin, eyes, and clothing. Do not breathe vapor or mist. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. See section 8 for more information.

**Other information** Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Use non-sparking tools. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

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**Precautions for safe handling**

**Advice on safe handling**

Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

**General hygiene considerations**

Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes, and clothing. Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**

Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Keep container closed when not in use.

**Incompatible materials**

Acids. Caustics. Water. Oxidizing agents. Reactive metals. Isocyanates. Chromic anhydride.

**Poisons Schedule (SUSMP)**

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Limits**

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Methyl alcohol (Methanol): 8hr TWA = 262 mg/m<sup>3</sup> (200 ppm), 15 min STEL = 328 mg/m<sup>3</sup> (250 ppm), Sk

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

`Sk' (skin) Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### Appropriate engineering controls

#### Engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

### Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, RUBBER BOOTS, AIR MASK , GLOVES (Long), APRON.



#### Eye/face protection

Tight sealing safety goggles.

#### Skin and body protection

Antistatic boots. Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

#### Hand protection

Impervious gloves.

#### Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

#### Environmental exposure controls

No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available.
Color	Colourless or Yellowish
Odor	Methanol
Odor threshold	No information available.

### Property

pH	ca. 11	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	1-5°C	
Boiling point / boiling range	93°C	

### Values

### Remarks • Method

Flash point	32°C	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	26.5%	
Lower flammability or explosive limits	5.5%	
Vapor pressure	50 mmHg @20°C	
Vapor density	1.1 for methanol (air=1)	
Relative density	0.969	
Water solubility	Hydrolysed by water	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	455°C	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	

#### Other information

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactivity Reacts violently with water.

### Chemical stability

Stability Stable under normal conditions.

### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

### Possibility of hazardous reactions

Possibility of hazardous reactions Heating causes rise in pressure with risk of bursting.

### Conditions to avoid

Conditions to avoid Heat, flames and sparks. Do not contaminate food or feed stuffs.

### Incompatible materials

Incompatible materials Acids. Caustics. Water. Oxidizing agents. Reactive metals. Isocyanates. Chromic anhydride.

### Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Formaldehyde.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

### Information on likely routes of exposure

<b>Product Information</b>	<p>Methanol is more toxic to humans and primates than to most experimental animals, due to differences in how it is metabolized. Non-primates do not appear to experience the acidosis or vision effects observed in humans and primates.</p> <p>No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:</p>
<b>Inhalation</b>	May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. In confined or poorly ventilated areas, vapors can readily accumulate and can cause unconsciousness and death. Toxic if inhaled.
<b>Eye contact</b>	Causes serious eye damage.
<b>Skin contact</b>	Contact causes severe skin irritation and possible burns. May be absorbed through the skin in harmful amounts. Toxic in contact with skin.
<b>Ingestion</b>	Can burn mouth, throat, and stomach. Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache). <b>MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED.</b> Toxic if swallowed.
<b>Symptoms</b>	Irritation/Corrosion. May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing. Vapors may cause drowsiness and dizziness.

**Numerical measures of toxicity - Product Information**

No information available.

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol (methyl alcohol)	= 6200 mg/kg ( Rat )	= 15840 mg/kg ( Rabbit ) = 15800 mg/kg ( Rabbit )	= 64000 ppm ( Rat ) 4 h = 22500 ppm ( Rat ) 8 h
Methanol, sodium salt	= 2037 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-

See section 16 for terms and abbreviations

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Causes burns. Classification is based on mixture calculation methods based on component data.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage. Classification is based on mixture calculation methods based on component data.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	Causes damage to organs.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.



**Chronic effects:** Chronic exposure to methanol from skin contact, inhalation or swallowing, at concentrations greater than 1000 ppm can result in permanent blindness and central nervous system effects. Absorption of methanol into the body results in the production of metabolic toxins, formaldehyde and formic acid, which causes metabolic acidosis and selective injurious effects to the eye tissues.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Ecotoxicity** Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methanol (methyl alcohol)	-	LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)	-	-
Methanol, sodium salt	-	LC50: =346mg/L (48h, Leuciscus idus)	-	-

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

### Component Information

Chemical name	Partition coefficient
Methanol (methyl alcohol)	-0.77

### Mobility

**Mobility in soil** No information available.

### Other adverse effects

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from residues/unused products** Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

## 14. TRANSPORT INFORMATION

### ADG

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN number	1289
Proper shipping name	SODIUM METHYLATE SOLUTION
Hazard class	3
Subsidiary hazard class	8
Subsidiary hazard class 2	6.1
Packing group	II
Hazchem code	*2WE

### IATA

UN number	1289
UN proper shipping name	SODIUM METHYLATE SOLUTION
Transport hazard class(es)	3
Subsidiary hazard class	8
Subsidiary hazard class 2	6.1
Packing group	II

### IMDG

UN number	1289
UN proper shipping name	SODIUM METHYLATE SOLUTION
Transport hazard class(es)	3
Subsidiary hazard class	8
Subsidiary hazard class 2	6.1
Packing group	II
IMDG EMS Fire	F-E
IMDG EMS Spill	S-C

## 15. REGULATORY INFORMATION

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

#### National regulations

##### Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

#### **Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)**

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poisons Schedule (SUSMP)** 6

#### **Major hazard (accident/incident planning) regulation**

Verify that license requirements are met

Hazardous chemical

Threshold quantity (T)

Liquids that meet the criteria for Class 3 Packing Group II or III 50 000  
 Liquids with flash points <61°C kept above their boiling points at ambient conditions 200

**National pollutant inventory**

Subject to reporting requirement

Chemical name	National pollutant inventory
Methanol (methyl alcohol) - 67-56-1	10 tonne/yr Threshold category 1

**Banned and/or restricted**

This product contains one or more substance(s) subject to prohibition, authorization or restriction. Verify that requirements related to using, handling, and storing substances subject to prohibition, authorization or restriction are met.

Chemical name	Carcinogen	Restricted substance
Methanol (methyl alcohol) - 67-56-1		For spray painting at a concentration of >1% by volume

**International Inventories****AIIC**

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

**NZIoC**

All the constituents of this material are listed on the New Zealand Inventory of Chemicals.

**Legend:**

- Australian Inventory of Industrial Chemicals

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**16. OTHER INFORMATION**

**Reason(s) For Issue:** 5 Yearly Revised Primary SDS

**Issuing Date:** 24-Aug-2021

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.**

**Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**End of Safety Data Sheet**