

# Safety Data Sheet



## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** METHYLATED SPIRITS, INDUSTRIAL

**Other name(s):** IMS 95; Denatured ethanol 95%; Ethanol 94 TBA.

**Recommended Use of the Chemical and Restrictions on Use** Industrial solvent, cleaning formulations, hand sanitiser base.

**Supplier:** Ixom Operations Pty Ltd  
**ABN:** 51 600 546 512  
**Street Address:** Level 8, 1 Nicholson Street  
East Melbourne Victoria 3002  
Australia

**Telephone Number:** +61 3 9906 3000  
**Emergency Telephone:** 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

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

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

### Classification of the chemical:

Flammable liquids - Category 2  
Eye Irritation - Category 2A

**SIGNAL WORD:** DANGER



### Hazard Statement(s):

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.

### Precautionary Statement(s):

#### Prevention:

P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground or bond container and receiving equipment.  
P241 Use explosion-proof electrical, ventilating, lighting equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves / protective clothing / eye protection / face protection.

# Safety Data Sheet

**Response:**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370+P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

**Storage:**

P403+P235 Store in a well-ventilated place. Keep cool.

**Disposal:**

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

**Poisons Schedule (SUSMP):** None allocated.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Ethyl alcohol	64-17-5	ca. 93-100%	H225 H319
Water	7732-18-5	0-5%	-
Methyl isobutyl ketone	108-10-1	0-<1%	H225 H332 H319 H335
Denatonium benzoate	3734-33-6	0-<1%	H302 H332 H315 H318 H335 H412
2-methylpropan-2-ol	75-65-0	0-<1%	H225, H319, H332, H335

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

**Inhalation:**

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

**Skin Contact:**

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

**Eye Contact:**

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

**Ingestion:**

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Get to a doctor or hospital quickly.

# Safety Data Sheet



## **Indication of immediate medical attention and special treatment needed:**

Treat symptomatically. For Ethanol: Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine, pyridoxine, Vitamins C and K). Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination. Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine). Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions. Fructose administration is contra-indicated due to side effects.

## **5. FIRE FIGHTING MEASURES**

### **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.

**Hazchem or Emergency Action Code:** · 2YE

### **Specific hazards arising from the chemical:**

Highly flammable liquid. On burning will emit toxic fumes, including those of oxides of carbon . May form flammable vapour mixtures with air. Vapour may travel a considerable distance to source of ignition and flash back.

### **Special protective equipment and precautions for fire-fighters:**

Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Keep containers cool with water spray. On burning will emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

## **6. ACCIDENTAL RELEASE MEASURES**

### **Emergency procedures/Environmental precautions:**

Shut off all possible sources of ignition. Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

### **Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:**

Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Use non-sparking tools. After cleaning, flush away any residual traces with water.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling:**

Avoid skin and eye contact and breathing in vapour. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke. May form flammable vapour mixtures with air. Vapour may travel a considerable distance to source of ignition and flash back. Take precautionary measures against static discharges. Do not use compressed air for filling, discharging, or handling operations. Follow label warnings even after container is emptied since empty containers may retain product residues.

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

Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Do not store in pits, depressions, basements or areas where vapours may be trapped. Keep containers closed when not in use - check regularly for leaks.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ethyl alcohol: 8hr TWA = 1880 mg/m<sup>3</sup> (1000 ppm)

Methyl isobutyl ketone: 8hr TWA = 205 mg/m<sup>3</sup> (50 ppm), 15 min STEL = 307 mg/m<sup>3</sup> (75 ppm)

tert-Butyl alcohol: 8hr TWA = 303 mg/m<sup>3</sup> (100 ppm), 15 min STEL = 455 mg/m<sup>3</sup> (150 ppm)

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.

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:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

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 (PPE):

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, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.



Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Clear Liquid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic Alcohol
<b>Solubility:</b>	Miscible with water.
<b>Specific Gravity:</b>	0.79-0.81 (ethanol)
<b>Relative Vapour Density (air=1):</b>	>1
<b>Vapour Pressure (20 °C):</b>	44 mm Hg (ethanol)
<b>Flash Point (°C):</b>	11-13
<b>Flammability Limits (%):</b>	3.3-19
<b>Autoignition Temperature (°C):</b>	392 (ethanol)
<b>% Volatile by Volume:</b>	100
<b>Boiling Point/Range (°C):</b>	78 (ethanol)
<b>pH:</b>	Not available
<b>Freezing Point/Range (°C):</b>	-117 (ethanol)

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Reacts with strong oxidising agents.
<b>Chemical stability:</b>	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Possibility of hazardous reactions:</b>	Aluminium containers should be avoided as aluminium alcoholates may be formed under certain conditions.
<b>Conditions to avoid:</b>	Avoid exposure to heat, sources of ignition, and open flame. Avoid contact with foodstuffs.
<b>Incompatible materials:</b>	Incompatible with oxidising agents , acids , acid chlorides , alkali metals , ammonia , potassium tert-butoxide, acid anhydrides, chloroformates, strong bases.
<b>Hazardous decomposition products:</b>	Oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

<b>Ingestion:</b>	Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs.
<b>Eye contact:</b>	An eye irritant.
<b>Skin contact:</b>	Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.

# Safety Data Sheet



**Inhalation:** Material may be irritant to the mucous membranes of the respiratory tract (airways). Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

**Acute toxicity:** ETHANOL (ETHYL ALCOHOL) :

Oral LD50 (rat): 7060 mg/kg

Inhalation LC50 (rat): 20,000 ppm/10 hr

**Skin corrosion/irritation:** Mild irritant (rabbit).  
**Serious eye damage/irritation:** Mild - severe irritant. (rabbit).  
**Respiratory or skin sensitisation:** No information available.

**Chronic effects:** Available evidence from animal studies indicate that repeated or prolonged exposure to this material could result in effects on the liver , kidneys , gastrointestinal tract and heart muscle .

**Mutagenicity:** No information available.  
**Carcinogenicity:** No information available.  
**Reproductive toxicity:** No information available.  
**Aspiration hazard:** No information available.

A study of the effects of ethanol inhalation in humans found that at between 5000-10000 ppm subjects experienced coughing and smarting of the eyes and nose, with symptoms disappearing within minutes. People exposed at 15000 ppm experienced continuous lacrimation and coughing. Irritation of the eyes and respiratory tract were not noted at concentrations below 5000 ppm. Repeated or prolonged exposure to relatively high doses of ethanol may result in damage to the liver leading to cirrhosis.

There is no clear evidence that ethanol is carcinogenic in laboratory animals; it is however a tumour promoter. Ethanol is typically inactive in genotoxic assays, but on some occasions a weak response has been noted. Oral exposure to ethanol produces malformations and developmental toxicity in rats and mice at maternally toxic doses. No developmental effects were observed in rats from inhalation at doses up to 20,000 ppm. Estimated fatal dose (human): 300-400 ml.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.  
**Persistence/degradability:** The material is biodegradable.  
**Bioaccumulative potential:** This product shows a low bioaccumulation potential.  
**Mobility in soil:** High mobility in soil.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:**  
Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

## 14. TRANSPORT INFORMATION

# Safety Data Sheet



## Road and Rail Transport

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



**UN No:** 1170  
**Transport Hazard Class:** 3 Flammable Liquid  
**Packing Group:** II  
**Proper Shipping Name or Technical Name:** ETHANOL (ETHYL ALCOHOL)  
**Hazchem or Emergency Action Code:** . 2YE

## Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**UN No:** 1170  
**Transport Hazard Class:** 3 Flammable Liquid  
**Packing Group:** II  
**Proper Shipping Name or Technical Name:** ETHANOL (ETHYL ALCOHOL)

**IMDG EMS Fire:** F-E  
**IMDG EMS Spill:** S-D

## Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

**UN No:** 1170  
**Transport Hazard Class:** 3 Flammable Liquid  
**Packing Group:** II  
**Proper Shipping Name or Technical Name:** ETHANOL

## 15. REGULATORY INFORMATION

### **Classification:**

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

### **Classification of the chemical:**

Flammable liquids - Category 2  
Eye Irritation - Category 2A

### **Hazard Statement(s):**

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.

**Poisons Schedule (SUSMP):** None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

*Product Name:* METHYLATED SPIRITS, INDUSTRIAL  
*Substance No:* 000030126001

*Issued:* 25/03/2020  
*Version:* 5

## 16. OTHER INFORMATION

Supplier Safety Data Sheet; 03/ 2020.

This safety data sheet has been prepared by Ixom Operations Pty Ltd (Toxicology & SDS Services).

### **Reason(s) for Issue:**

5 Yearly Revised Primary SDS  
Change in Hazardous Chemical Classification  
Change in Personal Protection Requirements  
Change in Stability and Reactivity

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.