



Total Chemicals Pty Ltd

"A Total Difference"

Material Safety Data Sheet

This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with National Standards and Guidelines from the Australian Safety and Compensation Council (ASCC, formerly National Occupational Health and Safety Commission - NOHSC).

Classified as **Hazardous** according to the criteria of the Australian Safety and Compensation Council ASCC (formerly NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC:1008] 3rd Edition.

Methylated Spirits is classified as **Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	Methylated Spirits		
Other Names:	Ethanol, Denatured Absolute Alcohol, Industrial Methylated Spirits		
Supplier:	TOTAL CHEMICALS PTY LTD	Telephone:	+61 07 3821 0333
	ABN 26 038 108 730	Facsimile:	+61 07 3821 2210
	15 Production Street	Internet	www.totalchemicals.com.au
	Wacol Qld 4077	e-mail:	info@totalchemicals.com.au

Major Uses and Methods of Application: Solvent for adhesives, coatings, resins and inks

2. COMPOSITION/INFORMATION ON INGREDIENTS

	CAS No.	PROPORTION
Ethanol (Ethyl alcohol)	64-17-5	70 - 100% v/v
water	7732-18-5	0 - 35% w/w
denaturant	various	<1% v/v

3. HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE:

Classified as **Hazardous** according to the criteria of the Australian Safety and Compensation Council ASCC (formerly NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC:1008] 3rd Edition.

Methylated Spirits is classified as **Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Risk Phrases:

- R11 Highly Flammable
- R20/22 Harmful by inhalation and if swallowed
- R36/38 Irritating to eyes and skin
- R66 Repeated exposure may cause skin dryness and cracking

4. FIRST AID MEASURES

If poisoning occurs contact a doctor or Poisons Information Centre.
Poisons Information Centre: 13 11 26 (available in Australia only).

If signs of drunkenness are evident the serious health effects may follow (depending on amount swallowed). Immediate medical attention should be sought and the effected person transferred to the care of a doctor or hospital. Treat unconsciousness by placing the person in a coma position. Apply artificial respiration if breathing stops.

Swallowed: Give water to drink to dilute stomach contents and seek medical attention. Do not attempt to induct vomiting or give anything by mouth to an unconscious person. Seek medical attention

Eye: Flush with flowing water for at least 15 minutes, and if symptoms persist, seek medical attention.

Skin: Flush skin with flowing water for at least 15 minutes. Remove contaminated clothing and shoes. If irritation persists, seek medical attention Decontaminate



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4. FIRST AID MEASURES

If poisoning occurs contact a doctor or Poisons Information Centre.
Poisons Information Centre: 13 11 26 (available in Australia only).

Inhalation: clothing before re-use or discard
Remove source of contamination or move person to fresh air. Give artificial respiration if breathing has stopped. Seek medical attention

Advice to Doctor: Treat as for excess alcoholic consumption. For advice on emergency treatment of alcohol poisoning refer to standard texts on Emergency medicine

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Specific Hazards: Highly flammable liquid. May form flammable mixtures with air
Burns with a colourless flame. The vapour is heavier than air and may travel along the ground; distant ignition and flash back are possible. Run off to sewers and drains may cause explosions- Isolate for at least 800 metres in all directions if tanks or tankers are involved. The use of compressed air for filling, discharging, mixing or handling is prohibited due to the vapour hazard. All vessels must be earthed to avoid generation of static charges when agitating or transferring solvents. Avoid all ignition sources.

Use water to cool exposed containers. Spills and leaks may be washed with copious volumes of water, fog or spray. Fire fighters must wear self-contained breathing apparatus with full facemask and protective clothing.
Use water, dry chemical, carbon dioxide or alcohol stable foam

Hazardous decomposition Products: Burning can produce carbon monoxide and / or carbon dioxide

6. ACCIDENTAL RELEASE MEASURES

Spills: Extinguish and do not turn on any ignition source - no smoking. Take precautionary measures against static discharges. Wear suitable protective equipment. Ensure area is well ventilated. Stop and contain the spill for salvage or absorb in inert absorbent material (e.g. soil, sand, vermiculite) for disposal by an approved method. Prevent run-off into drains and waterways Use water spray to disperse vapour. Wash the cleaned up area with copious volumes of water to remove any trace amounts of product. Ethanol mixes completely with water. Spills can be converted to non-flammable mixtures by dilution with water. Ventilate area well and ensure the atmosphere is safe before personnel return to the work area. If contamination of sewers or waterways has occurred, advise the local emergency services.

7. HANDLING AND STORAGE

Handling: Use in well ventilated areas away from all ignition sources. Intrinsically safe equipment only must be used in area where this chemical is being used. The use of compressed air for filling, discharging, mixing or handling is prohibited due to the vapour hazard. Containers must be earthed to avoid generation of static charges when agitating or transferring product

Storage: Store in tightly closed containers in a cool area separate from normal work areas and incompatible materials. The storage area should have adequate ventilation and no sources of heat or sparks. Use in minimal quantities in designated areas away from heat or sparks. containers should be covered when not in use, and should be stored in a grounded fire-resistant cabinet.
Empty containers retain residue (liquid and/or vapour) and are dangerous. Do not pressure cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition



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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Worksafe Australia Exposure Standard [NOHSC:1003(1995)]:

Ethanol: 1,000 ppm (1,880 mg/ m³) TWA

TWA – Time-weighted average airborne concentration over an eight hour working day, for a five day working week over an entire working life.

Personal Protection:

Eye protection: Safety glasses, goggles or face shield as required

Hand Protection: PVC, neoprene or nitrile rubber gloves

Footwear: Rubber boots

Respiratory Protection: If airborne concentrations are likely to exceed the Exposure Standard, wear approved organic vapour respiratory protection (AS/NZS 1715 and 1716). In high vapour concentrations, wear an air-supplied hood.

Safety showers with eyewash should be provided in all areas where product is handled. No respiratory protection required if engineering, storage and handling controls are adequate,

Engineering Controls:

General (mechanical) room ventilation plus special local exhaust ventilation at points where vapour could escape to the work environment. All ventilation equipment must be fitted with flame and explosion proof electrical fittings.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colourless liquid

Boiling Point: 78°C

Vapour Pressure: 44 mm Hg @ 20°C

Specific Gravity: 0.78 @20°C

Flash Point: 13°C (closed Cup)

Explosive Limits: LEL: 3.5%, UEL 19%

Solubility in water: soluble

Volatiles by volume: 100%

10. STABILITY AND REACTIVITY

Stable under ordinary conditions of use and storage. Carbon dioxide and carbon monoxide may form when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Toxicological Information: Based on product data

Oral – LD50 (Rat); 7060 mg / kg (ethanol)

Inhalation – LC50 (rat);38mg/l/ 10h (ethanol)

Swallowed:

Accidental swallowing unlikely under normal occupational use, but swallowing ethanol may cause harmful central nervous system effects. Effects may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death. Severe acute intoxication may cause hypoglycaemia, hypothermia and extensor rigidity. Other effects may include decreased blood pressure, vomiting blood, and blood changes. Aspiration into the lungs may cause pneumonitis.

Eye:

Vapours may irritate the eyes. Liquid and mists may severely irritate or damage the eyes.

Skin:

Moderately irritating to the skin. Brief contact may cause redness. Repeated or prolonged contact may lead to dermatitis with redness. Itching, swelling and possible secondary infection. A small proportion of people exposed to repeated



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11. TOXICOLOGICAL INFORMATION

Inhalation: skin contact might develop an allergic skin reaction. Moderately irritating to respiratory tract and mucous membranes. Inhalation of the vapour may result in headaches, nausea and vomiting. High concentrations may cause central nervous system symptoms similar to "swallowed" above

Chronic: Repeated or prolonged contact may lead to dermatitis with redness, itching, swelling and possible secondary infection. Chronic intoxication by swallowing or repeated inhalation may cause degenerative changes in the liver, kidneys, hair, gastrointestinal tract and heart muscle. Persons with pre-existing liver Impairment, skin and respiratory disorders may be at an increased risk from exposure. Ethanol may also cause adverse reproductive effects. Concurrent absorption of ethanol and some drugs may cause adverse health effects.

Note: The denaturants may be one or more of the following: diethyl phthalate, tertiary butyl alcohol, denatonium benzoate, methyl isobutyl ketone or fluorescein. The denaturants never exceed 1.0% of the final product and at this low concentration will not alter the safety of the product. Nasal and eye irritation usually occur at concentrations in air well below the Exposure Standard.

12. ECOLOGICAL INFORMATION

Ecotoxicity: (ethanol) Toxicity to fish (acute) LC50 Golden ide > 1000 mg //48h
Toxicity to daphnia: EC50/Daphnia magna: >1000 mg//24 h
Classed as biodegradable
Keep out of sewers, storm drains, surface waters and soil

13. DISPOSAL CONSIDERATIONS

For small spills or drips, wipe up and dispose in approved waste container. For large spills, contain and pump into waste containers for disposal by an approved method Keep out of sewers, storm drains, surface waters and soil

14. TRANSPORT INFORMATION

U.N. Number:	1170	Hazchem Code:	2[Y] E
D. G Class:	3	Packaging Group:	II

NOT TO BE STORED with explosives (Class 1), flammable gases in bulk (Class 2.1), poisonous gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidizing agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7). Exemptions may apply.

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Risk Phrase: R11 Highly Flammable
R20/22 Harmful by inhalation and if swallowed
R36/38 Irritating to eyes and skin
R66 Repeated exposure may cause skin dryness and cracking

Safety Phrase: S7 Keep container tightly closed
S16 Keep away from sources of ignition – No smoking
S23 Do not breathe the vapour
S24/25 Avoid contact with skin and eyes
S29 Do not empty into drains
S33 Take precautionary measures against static discharges
S36/37/39 Wear suitable protective clothing / gloves and eye / face protection

Hazard Category: Highly Flammable
Poisons Schedule: S5 in containers < 5 litres volume



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16. OTHER INFORMATION

For further information on this product, please contact:

Contact:	Technical Manager
Telephone:	+61 07 3821 0333

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END OF MSDS
