



METHYLATED SPIRITS

Safety Data Sheet

Section 1 – Identification

Product Identifier

Product name	Methylated Spirits Premium Grade Cleaning Alcohol.
Chemical name	Not Applicable
Synonyms	Product Code: UBMETHO
Proper shipping name	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

Recommended use of the chemical and restrictions on use

Relevant identified uses	General purpose cleaning agent, solvent, fuel.
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Details of the manufacturer or importer

Registered company name	ECOCLEAN UTILITY AGENCIES PTY LTD
Address	26 Notar Drive, Ormeau, Queensland AUSTRALIA 4207
Telephone	(07) 5549 3666
Website	www.ecocleanavantichem.com.au
Emergency phone number	Poisons Information Centre: Phone 13 11 26

Emergency Telephone Number

Association / Organisation	Poisons Information Centre
Emergency telephone number	13 11 26
Other emergency telephone numbers	In an emergency telephone 000, for fire, police and ambulance.



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Section 2 – Hazard(s) Identification

Classification of the substance or mixture	
Poisons Schedule	S5
ADG Code	Flammable 3
GHS Classification [1]	Flammable Liquids Category 2

Label elements	
GHS label pictograms	
Signal word	DANGER

Hazard statement(s)	
H225	Highly flammable liquid and vapour.

Precautionary statement(s): General	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.

Precautionary statement(s): Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bund container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.



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P280	Wear protective gloves/eye protection/face protection.
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Precautionary statement(s): Response

P370+P378	In case of fire: Use foam/water spray/fog for extinction.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Precautionary statement(s): Storage

P403+P235	Store in well ventilated place. Keep cool.
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Precautionary statement(s): Disposal

P501	Dispose of contents/container in accordance with local regulations.
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Section 3 – Composition and Information on Ingredients

Ingredient	CAS Name	Proportion
Ethanol	64-17-5	>= 95%
Denatonium benzoate	3734-33-6	6.6 ppm
Fluorescein	518-47-8	1 ppm
Methyl Isobutyl Ketone	108-10-1	0.25%
Water	7732-18-5	<= 5%

Section 4 – First Aid Measures

Description of necessary first aid measures	
Eye Contact	If this product comes in contact with eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist transport to nearest medical facility for additional treatment.
Skin contact	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.
Inhalation	Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing.
Ingestion	If swallowed, do NOT induce vomiting. Transport to nearest medical



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	facility for additional treatment.
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Symptoms caused by exposure	
Inhalation:	May cause irritation to the respiratory system. Inhalation of the vapour may result in drunkenness (as per effects of ingestion). Early symptoms may occur at airborne levels of 1000 to 5000ppm.
Skin:	May include burning sensation and/or a dried/cracked appearance. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Eye:	May include burning sensation, redness, swelling and/or blurred vision.
Ingestion:	Can cause drunkenness or harmful central nervous system effects. The deliberate ingestion of ethanol (50-100ml) may cause inebriation such that safety is impaired. Effects of a small intake may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, and fatigue. Ingestion of a large amount may lead to severe acute intoxication, tremors, convulsion, loss of consciousness, coma, respiratory arrest and death.

Medical attention and special treatment	
	Treat symptomatically

Section 5 – Fire Fighting Measures

Suitable extinguishing equipment / media	
	Alcohol stable foam, water spray or fog. Dry chemical powder, carbon dioxide for small fires only. Do not use water in a jet.

Special hazards arising from the chemical	
Fire incompatibility	Carbon monoxide and/or carbon dioxide may be evolved.

Special protective equipment and precautions for fire fighters	
Fire Fighting	<ul style="list-style-type: none">• Wear full protective clothing and self-contained breathing apparatus.• Hazchem code ·2YE.• Prevent, by any means available, spillage from entering drains or watercourse.



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	<ul style="list-style-type: none"> • Consider evacuation (or protect in place). • Fight Fire from a safe distance, with adequate cover. • If safe, switch off electrical equipment until vapour fire hazard removed.
Fire/Explosion Hazard	<ul style="list-style-type: none"> • Liquid and vapour are highly flammable. • Severe fire hazard when exposed to heat, flame and/or oxidisers. • Vapour may travel a considerable distance to source of ignition. • Heating may cause expansion or decomposition leading to violent rupture of containers. • Combustion products include carbon dioxide (CO₂), other pyrolysis products typical of burning organic material.

Section 6 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	
Minor spills	<ul style="list-style-type: none"> • Remove all ignition sources. • Clean up all spills immediately. • Avoid breathing vapours and contact with skin and eyes. • Control personal contact with the substance, by using protective equipment. • For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.
Major spills	<ul style="list-style-type: none"> • Clear area of personal and move upwind. • Alert Fire Brigade and tell them location and nature of hazard. • May be violently or explosively reactive. • Wear breathing apparatus plus protective gloves. • Prevent, by any means available, spillage from entering drains or watercourse. • Consider evacuation (or protect in place) • No smoking, naked lights or ignition sources. • For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush



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	<p>residues with water. Retain as contaminated waste.</p> <ul style="list-style-type: none"> • Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.
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Environmental precautions

	<ul style="list-style-type: none"> • Use appropriate containment to avoid environmental contamination. • Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. • Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. • Ventilate contaminated area thoroughly.
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Methods and materials for containment and cleaning up

	<ul style="list-style-type: none"> • Avoid contact with spilled or released material. • Shut off leaks, if possible without personal risks. • Isolate hazard area and deny entry to unnecessary or unprotected personnel. • Remove all sources of ignition in the surrounding area. • Take precautionary measure against static discharge. • Ensure electrical continuity by bonding and earthing all equipment. • Personal protective equipment advice is contained in Section 8 of the SDS.
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Section 7 – Handling and Storage

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> • Wear prescribed protective clothing. • Use in well ventilated area. • Do NOT eat, drink or smoke when handling. • Wash hands after use. • Keep containers closed tightly when not in use.
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	<ul style="list-style-type: none"> • Store in accordance to manufacturers instructions.
Other information	<ul style="list-style-type: none"> • Store in original containers. • Store in a cool, dry, well ventilated area out of direct sunlight. • Store in flammable approved cupboards or storage containers.

Conditions for safe storage, including any incompatibilities

Suitable container	<p>Bulk storage tanks should be banded.</p> <p>Store in original containers provided by the manufacturer.</p>
Storage incompatibility	<p>Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants.</p>

Section 8 – Exposure controls and personal protection

Control parameters

Occupational Exposure Limits (OEL)	See Ingredients Data and Emergency Limits below.
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Ingredients data

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australian Exposure Standards	ethanol	Ethyl alcohol	1880mg/ m3 1000 ppm	Not available	Not available	Not available
Australian Exposure Standards	Methyl Isobutyl ketone	Methyl Isobutyl ketone	205 mg/m3 50 ppm	307 mg/m3 75 ppm	Not available	Not available

Emergency limits

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
Ethanol	1000ppm	3000ppm	3300ppm	3300ppm
Methyl Isobutyl ketone	75 ppm	75 ppm	500 ppm	500 ppm

IDLH data


Ingredient	Original IDLH	Revised IDLH



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Ethanol	15,000 ppm	3,300 ppm
Methyl Isobutyl ketone	3,000 ppm	500 ppm

Exposure controls													
Appropriate engineering controls	<ul style="list-style-type: none"> Ensure adequate ventilation to keep airborne concentrations below exposure standards. Containers must be earthed to avoid generation of static charges when agitating or transferring product. 												
Personal protection	 <p>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.</p>												
Eye and face protection	<ul style="list-style-type: none"> Safety glasses or chemically resistant goggles should be worn to prevent eye contact. 												
Skin protection	<ul style="list-style-type: none"> See hand protection below 												
Hand protection	<ul style="list-style-type: none"> Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes. 												
Body protection	<ul style="list-style-type: none"> Normal work clothes and boots 												
Respiratory protection	<p>If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.</p> <p>Degree of protection varies with both face-piece and Class of filter the nature of the protection varies with Type of filter.</p> <table border="1"> <thead> <tr> <th>Required Minimum</th> <th>Half-Face Respirator</th> <th>Full-Face Respirator</th> <th>Powered Air Respirator</th> </tr> </thead> <tbody> <tr> <td>Protection factor</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Up to 10 x ES</td> <td>B-AUS P3</td> <td>-</td> <td>B-PAPR-AUS/Class 1 P3</td> </tr> </tbody> </table>	Required Minimum	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator	Protection factor	-	-	-	Up to 10 x ES	B-AUS P3	-	B-PAPR-AUS/Class 1 P3
Required Minimum	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator										
Protection factor	-	-	-										
Up to 10 x ES	B-AUS P3	-	B-PAPR-AUS/Class 1 P3										



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	Up to 50 x ES	-	B-AUS/Class 1 P3	-
	Up to 100 x ES	-	B-2 P3	B-PAPR-2 P3
Other protection	<ul style="list-style-type: none"> • Overalls • PVC apron • PVC protective suite may be required for prolonged exposure • Ensure there is access to eye washes and safety showers. 			
Thermal hazards	Not Available			

Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Colourless non-viscous liquid with a characteristic odour of alcohol.
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Physical state	Liquid	Relative density (water=1)	0.805
Odour	Alcohol	Partition coefficient n-octanol/water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	392
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting Point / Freezing Point (°C)	-117	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	78	Molecular weight (g/mol)	Not Available
Flash point (°C)	13 (Abel)	Taste	Not Available
Evaporation rate	2.53 BuAC=1	Explosive properties	Not Available
Flammability	Flammable	Oxidising properties	Not Available
Upper Explosive Limit (%)	19	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	3.5	Volatile Component (%vol)	100
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air=1)	1.59 @ 15°C	VOC g/L	Not Available



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Section 10 – Stability and Reactivity

Reactivity	Stable under normal conditions of use.
Chemical stability	Stable under normal conditions of use.
Possibility of hazardous reactions	Stable under normal conditions of use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	Burning can produce carbon monoxide and/or carbon dioxide.

Section 11 – Toxicological Information

Information on toxicological effects	
Inhaled	Inhalation of vapours or mists may cause irritation to the respiratory system. Inhalation of the vapour may result in drunkenness (as per effects of swallowing). Early symptoms may occur at airborne levels of 1000 to 5000 ppm.
Ingestion	Can cause drunkenness or harmful central nervous system effects. The deliberate ingestion of ethanol (50-100ml) may cause inebriation such that safety is impaired. Effects of a small intake may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, and fatigue. Ingestion of a large amount may lead to severe acute intoxication, tremours, convulsion, loss of consciousness, coma, respiratory arrest and death.
Skin contact	May include burning sensation and/or a dried/cracked appearance. Prolonged contact may cause defatting of skin which can lead to dermatitis.
Eyes	May include burning sensation, redness, swelling and/or blurred vision. Discomfort may last up to 2 days but healing is usually spontaneous and complete.
Chronic	Long term exposure by swallowing or repeated inhalation, may cause degenerative changes in the liver, kidneys, gastrointestinal tract and heart muscle.

X02 METHYLATED SPIRITS	Acute Toxicity	Skin Irritation/Corrosion
	TOXICITY	IRRITATION
	Not Available	Not Available
Ethanol	TOXICITY Inhalation (rat) LC 50: 20,000 ppm/10hr Inhalation (rat) LC50: 64,000 ppm/4hr Oral (rat) LD50: 7060mg/kg	IRRITATION Eye (rabbit): 500mg SEVERE Eye (rabbit): 100mg/24hr Moderate Skin (rabbit): 20mg/24hr Moderate Skin (rabbit): 400mg (open) Mild



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Methyl Isobutyl ketone	TOXICITY Oral (rat) LD50: 2080mg/kg	IRRITATION Eye (human): 200ppm/15 m Eye (rabbit): 40mg - SEVERE Skin (rabbit): 500 mg/24hr -mild	
Carcinogenicity	Not expected to be carcinogenic.	Reproductivity	Not expected to impair fertility.
Serious Eye Damage/Irritation	YES	STOT – Single Exposure	No data available
Respiratory or Skin sensitivity	No data available	STOT – Repeated Exposure	No data available
Mutagenicity	No data available	Aspiration Hazard	No data available

Section 12 – Ecological Information

Toxicity	
	Expected to be harmful. Ethanol biodegrades in soil rapidly. If a large quantity is in contact with soil it may leach into the ground water, however most is lost by evaporation. Ethanol is biodegradable and does not bio-accumulate to an appreciable extent.

Persistence and degradability		
Ingredient	Persistence: Water/Soil	Persistence: Air
Ethanol	Biodegradable.	Not Available

Bioaccumulative potential	
Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil	
Ingredient	Mobility
Ethanol	Does not bio-accumulate to an appreciable extent.



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Section 13 – Disposal considerations

Waste treatment methods	
Product and Packaging Disposal	Recycle containers if possible, or dispose in an authorised landfill. Ensure waste disposal confirms to local waste disposal regulations.

Section 14 – Transport Information

Labels Required	
Transport pictogram	
Marine Pollutant	No
HAZCHEM	·2YE

Land Transport (ADG)	
UN number	1170
Packing group	II
HAZCHEM	·2YE
UN proper shipping name	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Environmental hazard class(es)	No relevant data
Transport hazard class(es)	Class 3 Subrisk
Special precautions for user	Special provisions 144 Limited quantity 1L

Air transport (ICAO-IATA / DGR)	
UN number	1170
Packing group	II
UN proper shipping name	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Environmental hazard	No relevant data



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Transport hazard class(es)	ICAO/IATA Class	3
	ICAO/IATA Subrisk	
	ERG Code	3L
Special precautions for user	Special provisions	A3A58A180
	Cargo Only Packaging Instructions	364
	Cargo Only Maximum Qty/Pack	60L
	Passenger and Cargo Packing Instructions	353
	Passenger and Cargo Maximum Qty/Pack	5L
	Passenger and Cargo Limited Quantity Packaging Instructions	Y341
	Passenger and Cargo Limited Maximum Qty/Pack	1L

Sea transport (IMDG-Code / GGVSee)

UN number	1170	
Packing group	11	
UN proper shipping name	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	
Environmental hazard class(es)	Not Available	
Transport hazard class(es)	IMDG Class	3
	IMDG Subrisk	
Special precautions for user	EMS Number	F-E, S-D
	Special provisions	144
	Limited Quantities	1L

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Source	Ingredient	Pollution Category	Residual Concentration – outside special Area (%w/w)	Residual Concentration
40-7-4-9-0-0-MK-	Ethanol	Not Available	Not Available	Not Available



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Section 15 – Regulatory Information

Health, safety and environment regulations	
Poisons Schedule	S5

Section 16 – Other Information

Issue Date	19 th July 2015
Version Number	2.0
Abbreviations and acronyms	<p>ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail.</p> <p>AICS: Australian Inventory of Chemical Substances.</p> <p>CAS Number: Chemical Abstracts Service Registry Number.</p> <p>GHS: Globally Harmonized System of Classification and Labelling of Chemicals</p> <p>HAZCHEM: An emergency action code of numbers and letters which gives information to emergency services.</p> <p>HSIS: Hazardous Substances Information System</p> <p>IARC: International Agency for Research on Cancer.</p> <p>NOHSC: National Occupational Health and Safety Commission.</p> <p>NTP: National Toxicology Program (USA).</p> <p>SDS: Safety Data Sheet</p> <p>STEL: Short Term Exposure Limit.</p> <p>SUSDP: Standard for the Uniform Scheduling of Drugs and Poisons.</p> <p>TWA: Time Weighted Average.</p> <p>UN Number: United Nations Number.</p>
Literature references	<ul style="list-style-type: none"> • Preparation of Safety Data Sheets for Hazardous Chemicals – Code of Practice (December 2011 – Safe Work Australia) • GHS Hazardous Chemical Information List (September 2014 – Safe Work Australia) • Guidance on the Classification of Hazardous Chemicals under the WHS Regulations. April 2012. Safe Work Australia. • Global Harmonized System of Classification and Labelling of Chemicals (GHS). Fifth revised edition. • “Australian Exposure Standards”



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	<ul style="list-style-type: none"> List of Designated Hazardous Substances [NOHSC:10005(1999)] Australian Code For The Transport Of Dangerous Goods By Road And Rail – 7th Edition. Standard for the Uniform Scheduling of Medicines and Poisons 2015. Material Safety Data Sheets – individual raw materials – Suppliers. Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)] HSIS – Hazardous Substance Information System – National Worksafe Data Base. LABELLING OF WORKPLACE HAZARDOUS CHEMICALS, Code of Practice, DEC 2011 IMPLEMENTATION OF THE GLOBALLY HARMONISED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) APRIL 2012
Risk assessments	This SDS is a tool to communicate hazards which can assist you in creating relevant risk assessments for your workplace. There are many variables in determining whether a particular hazard is a risk in your workplace. Keep in mind this may be influenced by such things as the amount used, frequency of use, engineering controls, effectiveness of safety training and many more considerations.
Disclaimer	Safety Data Sheets are updated frequently. Please ensure that you have a current copy. This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact XO2 Pty Ltd. Our responsibility for products sold are subject to our standard terms and conditions. Where health or safety data given discloses a risk to the user or environment, it is the responsibility of the Purchaser to pass on that information to employees or those who may be using the product, ensuring that adequate safety procedures are used including good industrial hygiene.
Copyright	This document is copyright.
End of SDS	

Document Revision History

Revision #	Date	Reason for Revision
.01		GHS format
02	19.07.15	Review by WT