ASCC LTD
PO Box 316022, Wairau Valley Post Centre,
North Shore 0760, Auckland NZ
Phone: 09 966 2447
CHEMCALL: 0800 243 622

FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS FOLLOWING

Issue: October 2022

PRODUCT:	Methylated Spirits CLRD
Other Names:	Ethanol solution, Denatured alcohol
Uses:	Industrial solvent; cleaning component
Signal Word:	DANGER

UN No.	1170
Dangerous Goods Class	3
Subsidiary Risk	None
Pack Group	II
Hazchem	2YE

Hazardous Nature:	This product is classified as hazardous under GHS (7th revised edition) in acordance with the New Zealand Hazardous Substances (Hazard Classification) Notice 2020
Hazardous Classification:	Flammable liquids, Cat. 2; Eye irritation, Cat. 2; Reproductive toxicity, Cat. 2; Specific target organ toxicity - repeated exposure, Cat. 2
HSNO Approval Number:	HSR002553
NZ Exposure Standards:	TWA: Ethanol (Ethyl alcohol): 1880 mg/m^3 (1000 ppm); Methanol (Methyl alcohol): 262 mg/m^3 (200 ppm): STEL: Methanol (Methyl alcohol): 328 mg/m^3 (250 ppm)

Physical Characteristics (Typical)	**Section 9 of SDS**
Appearance	Clear, violet liquid
Boiling Point/ Range (°C):	78
Flash Point (°C):	11
Specific Gravity/ Density (g/mL):	0.79
Chemical Stability:	Stable at room temperature and pressure.

Product Ingredients		**Section 3 of SDS**
Ethyl alcohol	64-17-5	>90%
Methyl alcohol	67-56-1	<2%
Water	7732-18-5	<1%
Violet dye	Various	<0.1%

For further ingredients information, please refer to the full SDS.

GHS Pictograms **Section 2 of SDS**

For further risk and safety information, please refer to the full SDS.

DEFINITIONS

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993. Products not classed as Dangerous Goods are designated as not regulated for transport or N/R (non-regulated).
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials classified with risks such as potential for misuse, like flammability, or explosions when heated and ignited, may be both classed as Dangerous Goods and Hazardous Substances.

SUMMARY INFORMATION ONLY

1. IDENTIFICATION

Product Name:	**Methylated Spirits CLRD**
Other Names:	Ethanol solution, Denatured alcohol
Chemical Family:	Alcohols
Recommended Use:	Industrial solvent; cleaning component
Supplier:	ASCC Limited
Street Address:	112A Bush Road, Rosedale, Auckland, New Zealand
Telephone:	(09) 966 2447
Emergency phone:	**0800 243 622 (24 hours)**
	+64 4 917 9888 (Outside NZ)
National Poisons Centre:	0800 764 766

2. HAZARDS IDENTIFICATION

Hazardous Nature

This product is classified as hazardous under GHS (7th revised edition) in acordance with the New Zealand Hazardous Substances (Hazard Classification) Notice 2020

Hazardous Classification

Flammable liquids, Cat. 2; Eye irritation, Cat. 2; Reproductive toxicity, Cat. 2; Specific target organ toxicity - repeated exposure, Cat. 2

GHS Pictograms

Signal Word DANGER

Dangerous Goods Classification 3

Hazard Statements

H225: Highly flammable liquid and vapour

H319: Causes serious eye irritation

H361: Suspected of damaging fertility or the unborn child

H373: May cause damage to organs through prolonged or repeated exposure

H303: May be harmful if swallowed

Precautionary Statements

P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/…/equipment.

P242: Use non-sparking tools.

P243: Take action to prevent static discharges

P260: Do not breathe mist/vapours/spray.

P264: Wash hands and face thoroughly after handling.

P280: Wear protective gloves/clothing and eye/face protection.

Response Statements

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

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.

P308+P313: If exposed or concerned: Get medical advice/attention.

P370 + P378: In case of fire: Use dry chemical, carbon dioxide or alcohol resistant foam to extinguish

P312: Call a POISON CENTER/ doctor/…/if you feel unwell.

Storage Statements

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

P405: Store locked up.

Disposal Statements

P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

3. COMPOSITION: Information on Ingredients

Chemical Ingredient	CAS No.	Proportion (%v/v)
Ethyl alcohol	64-17-5	>90
Methyl alcohol	67-56-1	<2
Water	7732-18-5	<1
Violet dye	Various	<0.1

4. FIRST AID MEASURES

For advice, contact National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor.

Inhalation

Move the victim to fresh air and keep at rest in a position comfortable for breathing. Begin artificial respiration if breathing has stopped. Seek medical attention

Skin/Hair Contact

If skin or hair contact occurs, wash with large amounts of running water. Seek medical attention if any irritation occurs.

Eye Contact

Hold eyelids apart and flush the eye with running water for at least 15 minutes. Seek medical attention if irritation persists

Ingestion

If swallowed, do not induce vomiting. Give a glass of water to drink, if conscious. Never give anything by mouth to an unconscious person. Begin artificial respiration if the victim is not breathing. Use mouth to nose rather than mouth to mouth. Seek medical attention.

Most Important Symptoms and Effects

Irritating to eyes

First Aid facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable Extinguishing Media

Alcohol stable foam, dry chemical powder or carbon dioxide. Use water spray or foam for large fires only.

Specific Hazards Arising from the Material

Highly flammable liquid and vapour. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heatling may cause expansion or decomposition leading to violent rupture or containers.

Hazards from combustion products

Carbon monoxide, carbon dioxide, other pyrolysis products typical of burning organic material.

Fire-fighting Precautions

Fight fire from a safe distance, with adequate cover. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected locations. If safe to do so, remove containers from path of fire.

Special Protective Equipment

Full protective clothing and self contained breathing apparatus

Hazchem Code: 2YE

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Prevent material from escaping to drains and waterways. Contain leaking packaging in a containment vessel. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Personal Precautions

Highly flammable liquid and vapour. Avoid contact with spilt material. Prevent any vapours from building up in confined areas. Vapours heavier than air and can spread across the ground.

Environmental Precautions

Prevent spillage from entering drains or water courses.

Methods and Materials for Containment

Contain and absorb small quantities with vermiculite or other absorbent material; wipe up. Collect residues in a flammable waste container.

Major land spill

- Eliminate sources of ignition
- Warn occupants of downwind areas of possible fire/explosion or toxicity hazard
- Prevent product from entering sewers, watercourses, or low-lying areas
- Keep the public away from the area
- Shut off the source of the spill if possible and safe to do so
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation
- Take measures to minimise the effect on ground water
- Contain any spilled liquid with sand or earth
- Recover liquid spills by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material
- Recover solid spills by mechanical collection methods; cover and prevent dusts or particles from spreading – consider wetting the product down, without diluting it – and vacuum or sweep up
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations
- See “First Aid Measures” and “Stability and Reactivity”

Major water spill

- Eliminate any sources of ignition
- Warn occupants and shipping in downwind areas of possible fire/explosion or toxicity hazard
- Notify the port or relevant authority and keep the public away from the area
- Shut off the source of the spill if possible and safe to do so
- Confine the spill if possible
- Remove the product from the surface by skimming or with suitable absorbent material
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations
- See “First Aid Measures” and “Stability and Reactivity”.

7. HANDLING AND STORAGE

Precautions for safe handling

This product is highly flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark)

Conditions for safe storage

Store in tightly closed original container in a dry, cool and well-ventilated place.

Storage compatibility

Natural, neoprene or nitrile rubbers, EPDM, polystyrene.

See also: Section 10 – Stability and Reactivity for further information on incompatible materials

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards

New Zealand: *Workplace Exposure Standards and Biological Exposure Indices, Edition 13: April 2022*

TWA: Ethanol (Ethyl alcohol): 1880 mg/m^3 (1000 ppm); Methanol (Methyl alcohol): 262 mg/m^3 (200 ppm)

STEL: Methanol (Methyl alcohol): 328 mg/m^3 (250 ppm)

Advisory information Methanol (Methyl alcohol): skin

Australia: *Workplace Exposure Standards for Airborne Contaminants, 16 December 2019*

TWA: Ethanol: 1880 mg/m^3 (1000 ppm); Methanol: 262 mg/m^3 (200 ppm)

STEL: Methanol: 328 mg/m^3 (250 ppm)

Advisory information Not determined

International:

Not determined

The time weighted average (TWA) exposure standard is the highest allowable average airborne concentration of a particular substance when calculated over an eight-hour working day.

The short-term exposure limit (STEL) exposure standard is the maximum allowable exposure concentration for a substance during any 15-minute period in the working day.

Products may be identified as carcinogens, respiratory or skin sensitisers, ototoxins, or easily absorbed to the skin according to the below notations.

6.7A/Carcinogen Category 1: Known or presumed human carcinogen

6.7B/Carcinogen Category 2: Suspected human carcinogen

Carc 1A: Known to have carcinogenic potential for humans

Carc. 1B: Presumed to have carcinogenic potential for humans

Carc. 2: Suspected human carcinogen

Skin/Sk: Substance is considered to have potential for significant skin absorption, risking overexposure

Oto: Substance can cause hearing loss. This may be in conjunction with noise exposure or without concurrent noise exposure. Risk may be via inhalation or skin absorption.

Sen: Substance is identified as having potential to cause respiratory and/or dermal sensitisation – an allergic reaction or hypersensitivity affecting skin (dsen) or respiratory system (rsen). High exposure may hasten the onset of the allergy, but once developed in an individual, very low exposures can provoke a significant reaction.

Biological Limit Values

Methanol BEI: 15 mg/L methyl alcohol in urine at end of shift

Engineering Controls

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory protection: Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face or full-face filter mask to protect from overexposure by inhalation.

Recommended filter type: Type AX Filter of sufficient capacity

Refer to AS/NZS 1715: *Selection, Use and Maintenance of Respiratory Equipment* and AS/NZS 1716*: Respiratory Protective Devices* for further details on the use of respiratory protective equipment.

Eye protection: Wear safety glasses with side shields or chemical goggles.

Skin/ body protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Clear, violet liquid
Odour	-	Not available
Odour threshold	ppm	Not available
Melting Point/Freezing Point	°C	-117
Boiling Point/ Range	°C	78
Flash Point	°C	11
Flammability	-	Highly flammable
Explosive Limits (LEL – UEL)	%	3.4 – 19.0
Vapour Pressure	kPa	5.9
Vapour Density @20°C	kPa	1.59
Specific Gravity / Density	g/mL	0.79
Autoignition Temperature	°C	422

Property	Unit of measurement	Typical value
Decomposition Temperature	°C	Not available
pH	-	Not available
Kinematic Viscosity	cSt	Not available
Solubility with Water	% w/w	Soluble
Other Solubility	% w/w	Not available
Partition Coefficient: n-octanol/water	-	Not available
Particle Characteristics	-	Not available
Percent Volatiles	%	Not available
Other Information	-	-

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

10. STABILITY AND REACTIVITY

Reactivity

No reactivity hazards identified

Chemical Stability

Stable at room temperature and pressure.

Conditions to Avoid

Sources of heat and ignition, open flames.

Incompatible materials

Oxidising agents, strong bases, acids, acid chlorides, acid anhydrides, chloroformates

Hazardous Decomposition Products

Decomposition products on burning (carbon oxides, hydrocarbons).

Hazardous Reactions

None identified

Hazardous Polymerisation

Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

Ingestion of large amounts can result in central nervous system effects with symptoms such as headaches, dizziness, hallucinations, euphoria, excitation, drowsiness, blurred vision, fatigue, tremors, convulsions, vomiting and possible loss of consciousness. Severe acute intoxication effects may include hypoglycaemia, hypothermia, extensor rigidity, decreased blood pressure, vomiting blood and blood discharges. Aspiration to the lungs may cause chemical pneumonitis.

Inhalation

May be moderately irritating to respiratory system. Inhalation of high concentrations may result in nervous system depression which can lead to dizziness, headaches, nausea and vomiting. Inhalation or high or prolonged exposure may cause adverse central nervous system effects; see symptoms described under Ingestion.

Skin Contact

Mildly irritating to the skin. Prolonged or repeated exposure may result in dryness and cracking of skin, itching or swelling. A small proportion of the population may develop an allergic skin reaction.

Eye Contact

The liquid, mists and very high concentrations of vapour may severely irritate or damage the eyes and may cause pain, redness, irritation, tearing.

Chronic Effects

Ethyl alcohol may cause adverse reproductive effects (foetal toxicity).

Methyl alcohol a low concentration component in the product is identified as suspected of damaging fertility or the unborn child.

Chronic intoxication from ingestion of the product, or repeated inhalation, may cause degenerative changes in liver, kidneys, hair, gastrointestinal tract and heart muscle.

Other Health Effects Information

Persons with pre-existing liver impairment and respiratory disorders may be at an increased risk from exposure. The effects of this product in combination with toluene are potentiated (greatly increased). This means that the effects suffered by ingestion or inhalation will be increase or experienced more quickly.

Toxicological Information

Acute Toxicity - Oral: Not classified as acutely toxic by ingestion

LD_{50}: Methyl alcohol: LD_{50} (oral, mouse) = 870 mg/kg

Acute Toxicity – Dermal: Not classified as acutely toxic by skin contact

LD_{50}: Ethanol: 17100 mg/kg; Methanol: 15800 mg/kg

Acute Toxicity – Inhalation: Not classified as acutely toxic by inhalation

LC_{50}: Ethanol: 63927 mg/L/4 h

Skin Corrosion/Irritation: Not classified

Serious Eye damage/irritation: Causes serious eye irritation

Respiratory or Skin Sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Suspected of damaging fertility or the unborn child

Specific Target Organ Toxicity (STOT) – Single Exposure: Not classified

Specific Target Organ Toxicity (STOT) – Repeated Exposure: May cause damage to organs through prolonged or repeated exposure

Aspiration Hazard: Not classified

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Toxicity

Not classified as hazardous to the aquatic environment.

Fish toxicity:	No data available
Crustacean toxicity):	No data available
Algae toxicity:	No data available

Terrestrial Ecotoxicity

Not classified as hazardous to the terrestrial environment

Persistence/Degradability

Product is readily biodegradable - volatises to air.

Bioaccumulative Potential

Bioaccumulation potential is low

Ethanol: Log K_{OW} = -0.31

Methanol: BCF = 10

Mobility in Soil

Product is soluble in water.

Highly mobile. Ethanol K_{OC} = 1

Other adverse effects

No additional adverse effects identified

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Disposal of hazardous waste must be carried out in compliance with all applicable regional and national regulations. This product is NOT suitable for disposal by domestic landfill or via municipal sewers, drains, natural streams or rivers. It must be disposed as chemical waste in accordance with the local authority.

Ensure that disposal of this product and its packaging is in accordance with the Hazardous Substances (Disposal) Notice 2017.

Refer to Section 8 of this SDS for precautions before carrying out disposal or recycling activities.

Product Disposal

Dispose of product as chemical waste via a licenced service provider.

Packaging Disposal

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain harmful residue and/or fumes and vapours that are flammable. Ensure that empty packaging is allowed to dry

14. TRANSPORT INFORMATION

Road and Rail Transport (NZS 5433)		Marine Transport (IMDG)		Air Transport (IATA)	
UN No.	1170	UN No.	1170	UN No.	1170
Proper Shipping Name	ETHANOL SOLUTION	Proper Shipping Name	ETHANOL SOLUTION	Proper Shipping Name	ETHANOL SOLUTION
DG Class	3	DG Class	3	DG Class	3
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Packing Group	II	Packing Group	II	Packing Group	II

Dangerous Goods Segregation

This product is classified as Dangerous Goods Class 3, packing group II.

Please consult the *New Zealand Standard for Transport of Dangerous Goods on Land* (NZS 5433:2020) for further information.

Environmental Hazards

Marine Pollutant: No

Special Precautions

-

Additional Information

-

Hazchem Code: 2YE

Marpol 73/78 Convention – Annex II

Product Name: Not applicable

Ship Type: -

Pollution: -

15. REGULATORY INFORMATION

Country/ Region: New Zealand

Inventory: New Zealand Inventory of Chemicals **(**NZIoC)

Status: All components are listed in NZIoC

HSNO Approval:

HSR002553: Denatured Ethanol Group Standard 2020

Classification

GHS classification: Flammable liquids, Cat. 2; Eye irritation, Cat. 2; Reproductive toxicity, Cat. 2; Specific target organ toxicity - repeated exposure, Cat. 2

Equivalent HSNO classification: 3.1B, 6.4A, 6.8B, 6.9B

HSNO/HSWA Controls:

Refer to the above Group Standard, Health and Safety at Work Act 2015, www.epa.govt.nz and www.worksafe.govt.nz for further information on controls

Certified Handler: Not required

Tracking: Not required

Restriction to workplace: Not applicable

Signage: Threshold quantity: 250 L

Fire extinguishers: Threshold quantity: 250 L

Emergency Response Plan: Threshold quantity: 1,000 L

Secondary containment: Threshold quantity: 1,000 L

Hazardous Substance Location requirements: 100 L (closed containers greater than 5 L); 250 L (closed containers up to and including 5 L); 50 L (open containers)

Agricultural Compounds and Veterinary Medicines Act 1997 (ACVM)

Not applicable

International Agreements

Montreal Protocol on Substances that Deplete the Ozone Layer: Not applicable

Stockholm Convention: Not applicable

Rotterdam Convention: Not applicable

Basel Convention: Not applicable

International Inventory Status:

Australian Inventory of Industrial Chemicals: Not determined

International Inventories:

Not determined

16. OTHER INFORMATION

SDS Version Number: 2.0

Reasons for Issue: Information review and update to GHS classifications. Sec. 14: UN number updated

Replaces SDS dated: 13 December 2018

New SDS issue date: 05 October 2022

Abbreviations:

ACGIH: American Conference of Governmental Industrial Hygienists

AS/NZS: Standards Australia & Standards New Zealand

BCF: Bioconcentration Factor

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service

CCID: Chemical Classification and Information Database

EC_{50}: Effective Concentration, 50 per cent

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GHS 7: Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition, 2017, published by the United Nations

HSNO: Hazardous Substances and New Organisms Act 1996

HSWA: Health and Safety at Work Act 2015

IARC: International Agency for Research on Cancer

IC_{50}: Half Maximal Inhibitory Concentration

LC_{50}: Lethal Concentration, 50 per cent

LD_{50}: Lethal Dose, 50 per cent

LEL: Lower Explosive Limit

LOAEL: Lowest-observed-adverse-effect level

N/R: Not Regulated

NOAEL: No-observed-adverse-effect-level

NOEC: No Observed Effect Concentration

NZIoC: New Zealand Inventory of Chemicals

NZS 5433 New Zealand Standard Transport of Dangerous Goods on Land

OECD: Organisation for Economic Co-operation and Development

STEL: Short-Term-Exposure Limit

TLV: Threshold Limit Value

TWA: Time-Weighted Average

UEL: Upper Explosive Limit

References:

- Supplier Safety Data Sheets
- EPA CCID https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/
- Workplace Exposure Standards and Biological Exposure Indices. 12th Edition, published by WorkSafe New Zealand November 2020. https://worksafe.govt.nz/topic-and-industry/work-related-health/monitoring/exposure-standards-and-biological-exposure-indices
- US NLM ChemIDPlus: https://chem.nlm.nih.gov/chemidplus/
- OECD eChemPortal Substance Search https://www.echemportal.org/echemportal/