



SAFETY DATA SHEET

PRODUCT NAME: ETHANOL DENATURED

Issue Date: April 24

SECTION 1: IDENTIFICATION

Product Name: Ethanol Denatured
Other Names: Ethanol Clear Meths Denatured, Ethyl Alcohol, Denatured Alcohol
Product Code: CETHA-CM-9920, CETHA-CM-995
Uses: Used for manufacturing chemicals such as lacquer thinners, industrial and domestic cleaners, solvents, antifreeze, and fuel. Industrial use only.
Supplier: HamChem Hamilton Chemicals Ltd, 75 Ruffell Rd, Hamilton
Phone: 07 974 4971 Web: www.hamchem.nz Email: info@hamchem.nz

- In emergency dial 111, and then ask for Fire, Ambulance or Police as necessary.
- In case of poisoning phone National Poisons Centre – 0800 764 766

SECTION 2: HAZARD IDENTIFICATION



GHS Classifications

Flammable Liquid – Category 3.1B

Eye Irritation – Category 6.4A

Signal Word: DANGER

Hazard Statements

H225 – Highly flammable liquid and vapour.

H319 – Causes serious eye irritation.

Prevention

P103 – Read label before use.

P210 – Keep away from heat, sparks, open flames & hot surfaces. No smoking.

P233 – Keep container tightly closed.

P240 – Ground/bond container and receiving equipment.

P241 – Use explosion proof electrical, ventilation & lighting equipment.

P242 – Use non-sparking tools.

P243 – Take action to prevent static discharges.

P264 – Wash hands thoroughly after handling

P280 – Wear protective gloves/clothing and eye/face protection

Response

P370 + P378 – In case of fire: Use water fog or alcohol-resistant foam to extinguish.

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 so. Continue rinsing.

Recommendations, suggestions or statements made in the bulletins are intended for the assistance of our customers. They are based upon our experience and judgement but must not be regarded as amounting to a legal warranty or as involving any liability on our part and must be read in conjunction with and subject to our Conditions of Sale which apply to goods supplied by us.

HamChem Ltd, 75 Ruffell Road, Hamilton, New Zealand. Phone: 07-974-4971 Email: info@hamchem.nz Web: www.hamchem.nz

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P337 + P308 + P313 – If eye irritation persists or if exposed or concerned: Get medical advice/attention.

Storage

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

Disposal

P501 – Dispose of contents/container to approved landfill in accordance with any local regulations.

SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS

Mixture: Denatured Alcohol

| Chemical Entity | CAS No. | Proportion (%w/w) |
|-----------------------------------|-----------|-------------------|
| Ethanol | 64-17-5 | 90-100% |
| Water | 7732-18-5 | 0-1% |
| Denaturants (Denatonium benzoate) | N Av | 0-1% |

SECTION 4: FIRST AID MEASURES

Consult the National Poisons Centre 0800 764 766 (0800 POISON) or a Doctor in every case of suspected poisoning. If medical advice is needed, have product container or label at hand.

If inhaled: Move person to fresh air and keep warm and at rest until recovered. Call a Poison Centre or Doctor for advice or take to local medical facility if recovery is not rapid.

If swallowed: Rinse mouth with water. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Call a Poison Centre or Doctor for advice.

If on skin: Remove immediately all contaminated clothing. Wash affected area with plenty of water followed by soap and water.

If in eyes: Hold eyes open and rinse continuously with water for several minutes. Remove contact lenses, if present. Continue rinsing for at least 15 minutes. Get medical attention if irritation persists.

Note to Physician: Treat symptomatically. Causes central nervous system depression.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: 13°C

Flammability Limits: LFL = 2% v/v, UFL = 12% v/v

Extinguishing Media: Carbon dioxide, dry chemical foam, water fog, water spray, sand, or dolomite. Alcohol resistant foam is preferred; if not available normal foam can be used.

Unsuitable Extinguishing Media: Do not use water jet.

Fire & Explosion Hazards: Under fire conditions this product may emit toxic and/or irritating fumes and gases including oxides of nitrogen, carbon monoxide and carbon dioxide.

Specific Hazards: This product is highly flammable. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Fire-Fighting Equipment: Wear self-contained breathing apparatus and personal protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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Spills: Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Ethanol may be violently or explosively reactive. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. (i.e. soil or sand). Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal.

Disposal: Dispose of contaminated waste or product to an approved landfill in accordance with local regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

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| SECTION 7: | HANDLING & STORAGE |
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Handling: Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers tightly closed. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

Storage: Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing and incompatible materials such as oxidising agents. (alkali metals, acids, acid chlorides, ammonia and potassium tert-butoxide). Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Containers: For containers or container linings, use mild steel or stainless steel. For container paints, use epoxy paint or zinc silicate paint. Aluminium is not a suitable container for storage. Ground the container and transfer equipment to eliminate static electric sparks. Keep containers closed at all times and check regularly for leaks.

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| SECTION 8: | EXPOSURE CONTROLS & PERSONAL PROTECTION |
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Exposure standards: NZ Workplace Exposure Standards (WES) have been set for these substances:

| Substance | TWA (ppm) | TWA (mg/m ³) | STEL (ppm) | STEL (mg/m ³) |
|-----------|-----------|--------------------------|------------|---------------------------|
| Ethanol | 1000 | 1880 | - | - |
| Ethanol | 200 | - | - | - |

Engineering controls: This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Personal protective equipment: Wear protective clothing. Safety shoes and boots need to be chemical resistant. Wear appropriate chemical resistant gloves, e.g., butyl rubber and natural rubber. Neoprene rubber and Viton may be suitable for splash or incidental contact. Avoid contact with eyes. Wear chemical

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goggles if splash or aerosol/mist exposure risk. Refer to the relevant AS/NZ standards for appropriate personal protective equipment.

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| SECTION 9: | PHYSICAL & CHEMICAL PROPERTIES |
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| Appearance: | Liquid |
| Colour: | Clear, colourless |
| Odour: | Characteristic (slight methylated odour) |
| Odour Threshold: | Not available |
| Freezing/Melting Point: | -112.3°C* |
| Boiling Point: | 78.3 °C* |
| Flammability: | Highly flammable |
| Flash Point: | Closed cup, 13°C* |
| Flammability Limits: | 19.0% v/v* |
| Autoignition Temp: | 363 °C (approximate)* |
| Decomposition Temp: | Not available |
| Vapour Pressure: | 5.9 kPa (20 °C)* |
| Density (20°C): | 0.79* |
| Solubility: | Completely miscible |
| pH: | Not available |
| Vapour Density (air =1): | 1.59* |
| Partition Coefficient: | -0.3 (n-octanol/water)* |
| Kinematic Viscosity: | Not available |
| Evaporation Rate (nBuAc = 1): | Not available |
| Particle Characteristics: | Not applicable |

* Ethanol

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| SECTION 10: | STABILITY & REACTIVITY |
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Stability (conditions to avoid): Stable under normal storage and use conditions. Avoid heat, sparks, open flames and other ignition sources.

Incompatibility (materials to avoid): Denatured Ethanol is incompatible with oxidising agents, alkali metals, acids, acid chlorides, ammonia and potassium tertbutoxide. Aluminium containers should be avoided as aluminium alcoholates may be formed under certain conditions. Material is hygroscopic.

Hazardous Decomposition Products: Thermal decomposition may result in the release of toxic and/or irritating fumes including: carbon dioxide and carbon monoxide.

Hazardous Polymerisation: Not known to occur.

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| SECTION 11: | TOXICOLOGICAL INFORMATION |
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Potential Health Effects: This section includes possible adverse effects, which might occur if this product is not handled in the recommended manner.

Acute Exposure:

Toxicity Data: Inhalation, LC₅₀ (rat): 20000 ppm/10h
Oral, LC₅₀ (rat): 7060 mg/kg

Ingestion: Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

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Inhalation: Avoid inhalation of vapours, sprays, or mist. May cause mild irritation to respiratory system with coughing. High concentrations may cause central nervous system depression resulting in headaches, dizziness, and nausea.

Skin Corrosion/Irritation: Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

Serious Eye Damage/Eye Irritation: Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory or Skin Sensitisation: Product is not classified as a respiratory or skin sensitiser.

Mutagenicity (effects on genetic material): Not classified as a mutagen.

Cancer Information: Not classified as a carcinogen.

Teratology (birth defects) and Reproductive Effects: Classified as a reproductive toxicant. Causes fetotoxicity in animals at doses which are maternally toxic. Causes fetal alcohol syndrome.

Systemic Target Organ Toxicity, Single Exposure: No information available. Not expected to be a specific target organ toxicant by single exposure.

Systemic Target Organ Toxicity, Repeated Exposure: Not expected to cause toxicity to a specific target organ.

Aspiration Hazard: No information available. Not expected to be an aspiration hazard.

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| SECTION 12: | ECOLOGICAL INFORMATION |
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Ecotoxicity: The available ecological data is given below.

Movement and Partitioning: Product is completely soluble in water.

Degradation and Persistence: Denatured Ethanol is substantially biodegradable in water.

Bioaccumulative Potential: Denatured Ethanol has a low potential for bioaccumulation.

Environmental Protection: Do not discharge this material into waterways, drains and sewers.

Other adverse effects: None identified.

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| SECTION 13: | DISPOSAL CONSIDERATIONS |
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Recover and recycle product whenever possible. Dispose of waste in accordance with Regional Authority or local council bylaws. Ensure empty containers are vented and dry. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send clean dry drums to recycler or metal scrap reclaimer. Do not use empty drums for storing other products.

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| SECTION 14: | TRANSPORT INFORMATION |
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| UN Number: | 1170 |
| Proper Shipping name: | ETHYL ALCOHOL |
| Dangerous Goods Class: | 3 |
| Subsidiary Risk: | - |
| Packing group: | II |
| Hazchem Code: | 2[Y]E |

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Ensure transportation methods prevent leakage from packages and collapsing loads.

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| SECTION 15: | REGULATORY INFORMATION |
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HSNO Classifications: 3.1B, 6.4A, 6.8B, 6.9B

EPA Approval # HSR002553 Denatured Ethanol Group Standard 2020

This substance is not required to be tracked as per Part 19 of the Health and Safety at Work (Hazardous Substances) Regulations 2017. All workplace personnel handling this substance are required to be trained on the safe handling and PPE requirements for the hazards associated with this substance.

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| SECTION 16: | OTHER INFORMATION |
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Date of Preparation: 15 April 2024

Reason for revision: Update to meet requirements of EPA NZ SDS Notice.

References: EPA NZ Chemical Classification and Identification Database.
Denatured Ethanol Group Standard 2020

Key to abbreviations:

CAS No. Chemical Abstracts Service Number
EPA Environmental Risk Management Authority
HSNO Hazardous Substances & New Organisms
STEL Short Term Exposure Limit
TWA Time Weighted Average
WES Workplace Exposure Standard

End of SDS.