



MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: DENATURED ABSOLUTE ALCOHOL F3 (DAAF 3)

Company: Recochem Inc. ABN: 69 010 485 999
Address : 1809 Lytton Road, Lytton, Queensland 4178
Phone: (07) 3308 5200 Fax: (07) 3308 5201
Emergency Telephone Number: (07) 3308 5200 Day, After Hours 1300 131 001

Other Names: Ethyl Alcohol, Absolute Alcohol Denatured
Manufacturer's Product Code: 15101
Recommended Use: High grade alcohol, denatured, Customs Permit Required

SECTION 2 HAZARDS IDENTIFICATION

**CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA
DANGEROUS ACCORDING TO THE CRITERIA OF THE ADG CODE**

Symbols: F Highly Flammable
Risk Phrases: R11 Highly Flammable
Safety Phrases: S2 Keep out of the reach of children
S7 Keep container tightly closed
S16 Keep away from sources of ignition – No smoking

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients

<i>Chemical Entity</i>	<i>CAS Number</i>	<i>Proportion (%)</i>
Ethanol	64-17-5	98%
Methanol	67-56-1	2%

SECTION 4 FIRST AID MEASURES

FIRST AID TREATMENT

Swallowed: If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment.

Eye: If in eyes, hold eyes open, flood with water for at least 15 minutes. If redness, burning, blurred vision, or swelling persist transport to nearest medical facility for additional treatment.

Skin: If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.

Inhaled: 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

First Aid facilities: Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers.

Advice to Doctor: Treat as for excess consumption of alcoholic drink.

Additional Information: None available.

SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Alcohol stable foam, water spray or fog. Dry chemical powder, carbon dioxide for small fires only. Do not use water in a jet.

Hazards from combustion products: Carbon monoxide and/or Carbon dioxide may be evolved.

Precautions for Fire Fighters and Special Protective Equipment: Wear full protective clothing and self-contained breathing apparatus.

Additional Information: Hazchem code 2[Y]E

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SECTION 6 ACCIDENTAL RELEASE MEASURES

Observe all local and national regulations

Spills and Disposal: Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Remove all sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment. Spills can be converted to non-flammable mixtures by dilution with water.

Methods and Materials for Containment and Clean Up Procedures: 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.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Retain as contaminated waste. Allow and residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling and Storage: Avoid breathing of or contact with material. Use in well ventilated areas. Wash thoroughly after handling. Avoid contact with skin and eyes and clothing. Handle open containers in well ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains. Do not eat, drink or smoke in contaminated areas. Before eating, drinking or smoking, remove contaminated clothing and wash hands. Do not store near strong oxidants.

Dispensing: Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment.

Flammability: Highly Flammable

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: National Occupational Health & Safety Commission (NOHSC) Worksafe Australia has set an exposure standard 1880mg/m³ (1000ppm) TWA (8hr).

Biological Limit Values: No biological limit allocated

Personal Protective Equipment:

Respiratory Protection: In instances where ethanol concentrations are likely to exceed 500ppm, an approved organic vapour respirator (AS/NZS 1715 and 1716) should be worn.

Hand Protection: Use solvent resistant gloves. Nitrile, PVC or neoprene.

Eye Protection: Wear safety Goggles.

Protective Clothing: Use chemical resistant glove/gauntlets, boots and apron. Skin protection not ordinarily required beyond standard issue work clothes.

Engineering Controls: Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists. Keep containers closed when not in use.

SECTION 9 IDENTIFICATION

PHYSICAL DESCRIPTION / CHEMICAL PROPERTIES

Appearance	Colourless Clear Liquid
Odour	Alcoholic
pH:	N/A
Vapour Pressure (mmHg @ 20°C):	44
Vapour Density (air = 1)	1.59 @ 15 Deg C
Boiling Point (°C):	78
Freezing/Melting Point (°C):	-117
Solubility in Water	Miscible with water
Specific Gravity (g/ml @ 15°C):	0.79-0.81
Flashpoint (°C):	13 (Abel)
Flammability Limits (%):	3.5 – 19.0
Auto Ignition Temperature (°C):	392
Percent Volatiles	100

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SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: 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

HEALTH EFFECTS

Acute:

Swallowed: Accidental swallowing is unlikely in the workplace setting. Swallowing 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. Aspiration in to lung may cause pneumonitis.

Eye: Vapours may irritate the eyes. Liquid or mists may severely irritate or damage the eyes.

Skin: Mild irritant. Prolonged contact may cause defatting of skin which can lead to dermatitis.

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 5000ppm.

Chronic: Long term exposure by swallowing or repeated inhalation, may cause degenerative changes in the liver, kidneys, gastrointestinal tract and heart muscle.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

Fish : Expected to be harmful

Aquatic Invertebrates : Expected to be harmful

Algae : Expected to be toxic

Microorganisms : Expected to be Harmful

Mobility : Miscible with water

Persistence/degradability : Biodegradable.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal Methods: Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

UN Number: 1170

Class: 3

Packing Group: II

Special Precautions for User: None

Proper Shipping Name: Ethanol

Subsidiary Risk: None allocated

Hazchem Code: 2[Y]E

SECTION 15 REGULATORY INFORMATION

Poisons Schedule : 5

AICS : Listed

Dangerous Goods Initial Emergency Response Guide (SAA HB76:2004) : 14

SECTION 16 OTHER INFORMATION

Further Information may be obtained by contacting Recochem on (07) 3308 5200

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product.