

# Chem Alert Report

Product Name **DIETHYL ETHER (FRONINE LABS).**

**Ingredient**  
DIETHYL ETHER

**Conc.** 100%  
**CAS No.** 60-29-7

**Shipping** **CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA**  
DIETHYL ETHER (ETHYL ETHER)

**Synonyms** ANAESTHETIC ETHER, DIETHYL ETHER (FRONINE LABS), DIETHYL OXIDE, ETHER, ETHOXYETHANE, ETHYL ETHER, SOLVENT ETHER, DIETHYL ETHER.

**Appearance** COLOURLESS LIQUID

**Odour** SLIGHT ODOUR

**Use(s)** SOLVENT, LABORATORY REAGENT, ANAESTHETIC.

**Supplier** FRONINE LAB SUPPLIES EXPORT Ph: +612 9627 3600 Emerg. Ph: +618 9322 1711

**Stock No.** 299, 300.

**Poison Sched** 6

**Hazchem** 3YE

**UN No.** 1155

**D.G Class** 3

**Sub/Tert Risk** None Allocated

**Pkg Group** I

**EPG** 3A1

## HEALTH HAZARDS

**Health Hazard Summary** Toxic - narcotic. This product has the potential to cause acute and chronic adverse health effects with over exposure. Avoid eye or skin contact and vapour inhalation. Chronic exposure may result in liver, kidney and nerve damage. Caution: may gradually decompose to form potentially explosive peroxides.

**Eye** Irritant. Exposure may result in lacrimation, irritation, pain, redness, conjunctivitis and possible corneal burns with prolonged contact.

**Inhalation** Moderate toxicity. Inhalation may result in mucous membrane irritation of the nose and throat, nausea and dizziness. Over exposure may cause breathing difficulties and unconsciousness.

**Skin** Irritant - toxic. Prolonged contact may result in drying and defatting of the skin, rash and dermatitis. Toxic effects may result from skin absorption.

**Ingestion** Toxic. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, fatigue, dizziness, drowsiness and unconsciousness with large doses. Aspiration may result in chemical pneumonitis and pulmonary oedema.

## PRECAUTIONS

**Flammability** Highly flammable liquid and vapour. Potentially EXPLOSIVE peroxides may form on standing. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.

**Reactivity** Incompatible with oxidising agents (eg. hypochlorites, peroxides), acids (eg. sulfuric acid), heat and ignition sources. Decomposes slowly in the presence of air and light to form highly unstable (potentially EXPLOSIVE) peroxides.

**Ventilation** Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical explosion proof extraction ventilation is recommended.

## PERSONAL PROTECTIVE EQUIPMENT

**PPE** Wear coveralls, splash-proof goggles and PVA or viton (R) gloves. Where an inhalation risk exists, wear a Type A (Organic vapour) Respirator. In a laboratory situation, wear a laboratory coat.



**Colour Rating**  
**AMBER**

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## FIRST AID

- Eye** Hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre, or for at least 15 minutes.
- Inhalation** Leave area of exposure immediately. If assisting a victim avoid becoming a casualty, wear an Air-line respirator where an inhalation risk exists. Remove victim from exposure area & keep warm. If victim is not breathing apply artificial respiration & seek urgent medical attention.
- Skin** Remove contaminated clothing and gently flush affected areas with water. Seek medical attention if irritation develops. Launder clothing before reuse.
- Ingestion** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor.

## SAFE HANDLING

- Storage** Store in cool, dry, well ventilated area, preferably flammables store, removed from direct sunlight, heat and ignition sources, oxidising agents (eg. peroxides), acids (eg. nitric acid) and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Large storage areas should have appropriate fire protection and ventilation systems.
- Waste Disposal** Wearing the protective equipment outlined, ensure all ignition sources are extinguished. For small quantities, absorb on paper, sand or similar and evaporate under a fume cupboard or open area. For large volumes, atomise into incinerator (mixing with more flammable solvent if required) or recycle by gravimetric separation, distilling & reusing. Contact the manufacturer for additional information if required.
- Transport** Class 3 Flammable liquid. Do not transport with chemicals of class; 1 (Explosives), 2.1/ 2.3 (Flammable/ Toxic gases), 4.2 (Spontaneously combustibles), 5.1 (Oxidising agents), 5.2 (Organic peroxides), 6 (Toxics), 7 (Radioactives) and foodstuffs.

## EMERGENCY

- Spillage** If spilt (bulk), contact emergency services. Wear splash-proof goggles, PVA/viton gloves, a Type A (Organic vapour) respirator or Air-line respirator, coveralls and rubber boots. Ventilate and clear area of all unprotected personnel. Eliminate heat and ignition sources, absorb spill with sand or similar and place in sealable containers for disposal. Prevent spill entering drains or waterways.
- Fire and Explosion** Highly flammable - explosive vapour. Evacuate area and contact emergency services. Toxic gases may be evolved when heated. Remain upwind and notify those downwind of hazard. Wear full protective equipment (see spill above) including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
- Extinguishing** Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways. Absorb runoff with sand or similar.

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## PHYSICAL AND CHEMICAL PROPERTIES

**Flammability:** HIGHLY FLAMMABLE  
**Boiling Point:** 34.6 C  
**Exposure Standard:** 400 ppm Diethyl ether  
**pH:** NOT AVAILABLE  
**Specific Gravity:** 0.706  
**Vapour Pressure:** 8.56 psi 20 C  
**Lower Explosion Limit:** 1.8 %  
**Vapour Density:** 2.6 (Air = 1)

**Flash Point:** - 4 C  
**Melting Point:** - 116 C  
**Evaporation Rate:** NOT AVAILABLE  
**% Volatiles:** NOT AVAILABLE  
**Solubility (water):** NOT AVAILABLE  
**Upper Explosion Limit:** 48 %  
**Autoignition Temperature:** 160 C