

Material Safety Data Sheet

1. Product and Company Identification

Catalog Numbers: 3FA-00

Product Name

Trade Name: Ether

Synonyms: Diethyl ether anhydrous; Diethyl ether; Ethyl ether

Manufacturer & Distributor

Company Name: Reagent World, Inc.

Address: 1901 S. Vineyard Ave

City: Ontario

State: California

Postal Code: 91761

Country: USA

Business/Emergency

Phone: 949-947-7779

Fax: 949-221-8677

URL: <http://www.ReagentWorld.com>

2. Hazards Identification

Emergency Overview: Extremely flammable. May form explosive peroxides. Harmful if swallowed. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. Hygroscopic (absorbs moisture from the air). Light sensitive. Air sensitive.

Potential Health Effects

Eye: May cause eye irritation. Causes redness and pain.

Skin: May cause skin irritation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May be absorbed through the skin. Causes redness and pain.

Ingestion: Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause drowsiness, unconsciousness, and central nervous system depression. Vapors may cause dizziness or suffocation. Causes irritation of the mucous membrane.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis. Prolonged or repeated exposure can cause psychic abnormalities such as anxiety, depression and excitability.

3. Composition/Information on Ingredients

Chemical Name: Ether

Molecular Formula: C₄H₁₀O

Molecular Weight: 74.12

Content: 99+%

CAS Number: 60-29-7

EINECS NO. [EC No]: 200-467-2

4. First Aid Measures

Eye: In case of contact immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid. Wash clothing before reuse.

Ingestion: Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

5. Fire Fighting Measures

General Information: Wear self-contained respirator. Wear fully protective impervious suit. In case of fire, the following can be released: Carbon monoxide (CO)

Extinguishing: Carbon dioxide Fire-extinguishing powder Foam

6. Accidental Release Measures

General Information: Use proper personal protective equipment as listed in Section 8.

Spills/Leaks: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation. Keep away from ignition sources.

7. Handling and Storage

Handling: Refer to section 8

1. Do not store in direct sunlight
2. Keep in a cool, dry place
3. Keep away from sources of ignition and combustible material
4. Keep container tightly closed

Storage:

5. well-ventilated area away from incompatible substances
6. Keep away from heat, sparks, and flame
7. Keep from contact with oxidizing materials
8. Store under an inert atmosphere
9. Do not expose to air
10. Store protected from light

8. Exposure Controls/Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower facility.

Personal Protective Equipment

Eyes: Wear chemical safety goggles.

Skin: Wear appropriate protective gloves.

Clothing: Wear appropriate protective clothing.

Respirators: Wear NIOSH/MSHA - approved respirator

9. Physical and Chemical Properties

Physical State: liquid

Color: APHA: 5 max

Odor: aromatic odor - sweetish odor

Boiling Point: 34.6

Melting Point : -116

Vapor Pressure : -

Specific Gravity : 0.706

PH: -

Solubility in Water : 69 g/l (20°C) in water

Flash Point: -

Autoignition Temperature : -

Decomposition Temperature : -

10. Stability and Reactivity

Chemical Stability: Prolonged exposure to air and sunlight may form unstable peroxides. Distillation may lead to the formation of peroxides.

Conditions to Avoid: Oxidizing agents Interhalogens Halogens Sulfur

Incompatibilities with Other: Oxidizing agents, strong acids, chlorine trifluoride, liquid chlorine, liquid oxygen, nitrates, nitric acid, permanganates, sodium peroxide, sulfuric acid, zinc, ozone, peroxides and hydroperoxides (organic, e.g. acetyl peroxide, benzoyl peroxide, butyl peroxide, methyl ethyl ketone peroxide), chromyl chloride, nitrosyl perchlorate, perchloric acid, chromic anhydride, azides, chlorine.

Hazardous Decomposition: Carbon monoxide and carbon dioxide

Products :

Polymerization : -

11. Toxicological Information

RTECS#: KI5775000

Toxicity Data[LD50/LC50]: Oral: LD50: 1215 mg/kg (rat) LDLo: 260 mg/kg (man) Inhalative: LCLo/30M: 31000 ppm/30M (mus) Irritation of skin: mild: 360 mg (rbt) severe: 50 mg/24H (gpg)

Carcinogenicity: Ether - Not listed by ACGIH, IARC, or NTP.

Other: See actual entry in RTECS for complete information.

12. Ecological Information

Ecotoxicity: Fish: Gold orfe: 2800 mg/l; 48H; LC50 static bioassay Fish: Fathead Minnow: 2600 mg/l; 96H; LC50 flowthrough bioassay

Other: This chemical is not likely to bioconcentrate. Do not empty into drains.

13. Disposal Considerations

Disposal considerations: Contact a licensed professional waste disposal service to dispose of this material in a manner consistent with federal, state and local environmental regulations

14. Transport Information

Shipping Name: DIETHYL ETHER

Hazard Class: 3

UN Number: 1155

Packing Group: I

15. Regulatory Information

European/International Regulations: -

European Labeling in Accordance with EC Directives

Hazard Symbols: 1.Xn
2.F

R-Phrases: 1.Extremely flammable.
2.May form explosive peroxides.
3.Harmful if swallowed.
4.Repeated exposure may cause skin dryness or cracking.
5.Vapours may cause drowsiness and dizziness.

S-Phrases: 1.Keep away from sources of ignition - No smoking.
2.Do not empty into drains.
3.Take precautionary measures against static discharges.
4.Keep container in a well-ventilated place.

WGK(Water Danger/Protection): 1

US Federal TSCA: -

16. Other Information

Other information: The above information is believed to be accurate but does not suppose to be all inclusive and shall be used only as a guide. Reagent World makes no warranty of merchantability or any other warranty, express or implied, with respect to such information. Users should make their own investigations to determine the accountability of the information for their purposes in particular. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential of exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.