

Material Safety Data Sheet / Safety Data sheet

Diethyl Ether

Section 1: Chemical Product Identifier and Synonyms

Product Name: Diethyl Ether

UN Number: UN1155

CAS Number: 60-29-7

Synonym: Ether, Ethoxyethane, Ethyl ether, Ethyl Oxide; 3-Oxapentane, Diethyl oxide; Solvent ether

Chemical Formula: (C₂H₅)₂O

Section 2: Composition and Information on Ingredients

Composition

Name	CAS Number:	% By Weight
Diethyl Ether	60-29-7	>100

Toxicology Data On Ingredients: Diethyl Ether LD50: Not Available. LC50: Not Available

Section 3: Hazards Identification

Potential Acute Health Effects:

Slightly hazardous in case of eye contact (irritant), of ingestion, of inhalation.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact during pregnancy/while nursing.

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures

Eye Contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact:

Wash off immediately with plenty of warm water and soap for at least 15 minutes. Immediate medical attention is required.

Inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

Ingestion:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Do not induce vomiting.

Section 5: Fire and Explosion Data

Flammability of the Product: Extremely flammable liquid and vapour.

Auto-Ignition Temperature: 170 °C

Flash Points: -39,99 °C

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances: Not available.

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Large Spill:

If in laboratory setting, follow Chemical Hygiene plan procedures. Place into properly labelled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust

deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (I.e., clearing dust surfaces with compressed air).

Section 7: Handling and Storage

Precautions:

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Storage:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class: Flammable liquids.

Section 8: Exposure Controls / Personal Protection

Engineering Controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

Personal Protection:

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter type P3.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odour: sweet, ether-like

Taste: Not available.

Molecular Weight: Not available.

Colour: Not available.

pH (1% soln/water): Not available.

Boiling Point: 34,6 °C at 1.013 hPa

Melting Point: -115,99 °C

Critical Temperature: Not available.

Specific Gravity: Not available. (Water = 1)

Vapour Pressure:

189 hPa at 0 °C

389 hPa at 10 °C

563 hPa at 20 °C

863 hPa at 30 °C

1.228 hPa at 40 °C

2.311 hPa at 60 °C

Vapour Density: 2.56 - (Air = 1.0)**Volatility:** Not available.**Odour Threshold:** Not available.**Water/Oil Dist. Coeff.:** Not available.**Ionicity (in Water):** Not available.**Dispersion Properties:** Not available.**Solubility:** Not available.**Section 10: Stability and Reactivity Data****Stability:** The product is stable under recommended conditions.**Instability Temperature:** Not available.**Conditions of Instability:** Heat, flames and sparks.**Incompatibility with various substances:** Oxidizing agents, Strong acids**Corrosivity:** Not available.**Special Remarks on Reactivity:** Not available.**Special Remarks on Corrosivity:** Not available.**Polymerization:** Not available.**Section 11: Toxicological Information****Routes of Entry:** Eye contact. Inhalation. Ingestion.**Toxicity to Animals:** (LD50): Not available. LC50: Not available.**Chronic Effects on Humans:** Not available.**Other Toxic Effects on Humans:** Slightly hazardous in case of ingestion, of inhalation. May cause harm to breastfed babies.**Special Remarks on Toxicity to Animals:** Not available.**Special Remarks on Chronic Effects on Humans:** Not available.**Special Remarks on other Toxic Effects on Humans:** Not available.**Section 12: Ecological Information****Ecotoxicity:** Toxic to aquatic life.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Information

Waste Disposal: Dispose of in accordance with local regulations

Section 14: Transport Information

DOT Classification: CLASS 3: Flammable liquids.

Identification: Ammonium Dichromate UN Number: UN1155 PG: I

Special Provisions for Transport: Not available.

Section 15: Regulatory Information

Regulations: Labelling according to Regulation (EC) No 1272/2008.

Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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