# Chemical Safety Data Sheet MSDS / SDS

### Ethyl propyl ether SDS

Revision Date: 2024-04-25 Revision Number: 1

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### Product identifier

Product name: Ethyl propyl ether

CAS: 628-32-0

### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified For R&D use only. Not for medicinal, household or other use.

uses:

Uses advised none

against:

### Company Identification

Company: Chemicalbook.in

Address: 5 vasavi Layout Basaveswara Nilayam Pragathi Nagar Hyderabad, India -500090

Telephone: +91 9550333722

### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

Not classified.

# GHS label elements, including precautionary statements Signal word No signal word Hazard statement(s) none Precautionary statement(s) Prevention none Response none Storage none Disposal none Other hazards which do not result in classification

# **SECTION 3: Composition/information on ingredients**

#### Substance

no data available

Chemical name: Ethyl propyl ether
Common names and Ethyl propyl ether

synonyms:

CAS number: 628-32-0 EC number: 211-036-3

Concentration: 100%

#### **SECTION 4: First aid measures**

#### Description of necessary first-aid measures

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

#### Most important symptoms/effects, acute and delayed

Excerpt from ERG Guide 127 [Flammable Liquids (Water-Miscible)]: Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control may cause pollution. (ERG, 2016)

#### Indication of immediate medical attention and special treatment needed, if necessary

no data available

### **SECTION 5: Firefighting measures**

### Suitable extinguishing media

Excerpt from ERG Guide 127 [Flammable Liquids (Water-Miscible)]: CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. CAUTION: For fire involving UN1170, UN1987 or UN3475, alcohol-resistant foam should be used. SMALL FIRE: Dry chemical, CO2, water spray or alcohol-resistant foam. LARGE FIRE: Water spray, fog or alcohol-resistant foam. Do not use straight streams. Move containers from fire area if you can do it without risk. FIRE INVOLVING TANKS OR CAR/TRAILER LOADS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices

or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. (ERG, 2016)

#### Specific hazards arising from the chemical

Excerpt from ERG Guide 127 [Flammable Liquids (Water-Miscible)]: HIGHLY FLAWWABLE: Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Those substances designated with a (P) may polymerize explosively when heated or involved in a fire. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. (ERG, 2016)

#### Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **SECTION 6: Accidental release measures**

### Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### **Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

#### Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

### **SECTION 7: Handling and storage**

#### Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

#### Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

### SECTION 8: Exposure controls/personal protection

#### Control parameters

#### Occupational Exposure limit values

no data available

#### Biological limit values

no data available

#### Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

#### Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

# SECTION 9: Physical and chemical properties and safety characteristics

Physical state: Ethyl propyl ether is a colorless liquid with an ether-like odor. Less dense than water.

Vapors heavier than air. Used to make other chemicals.

Colour: no data available

Odour: no data available

Melting 264°C(dec.)(lit.)

point/freezing

point:

Boiling point or 62°C

initial boiling point and boiling range:

Flammability: no data available

Lower and upper

explosion

limit/flammability

limit:

Flash point: 58°C(lit.)

Auto-ignition

no data available

no data available

no data available

temperature:

Decomposition

temperature:

pH: no data available

Kinematic no data available

viscosity:

Solubility: no data available

Partition no data available

coefficient noctanol/water:

Vapour pressure: no data available

Density and/or

0.74

relative density:

Relative vapour

no data available

density:

Particle no data available

characteristics:

### **SECTION 10: Stability and reactivity**

#### Reactivity

Highly flammable. Soluble in water. Ethers tend to form unstable peroxides when exposed to oxygen. Ethyl, isobutyl, ethyl tertbutyl, and ethyl tert-pentyl ether are particularly hazardous in this respect. Ether peroxides can sometimes be observed as clear crystals deposited on containers or along the surface of the liquid.

#### Chemical stability

no data available

#### Possibility of hazardous reactions

Ethers, such as ETHYL PROPYL ETHER, can act as bases. They form salts with strong acids and addition complexes with Lewis acids. The complex between diethyl ether and boron trifluoride is an example. Ethers may react violently with strong oxidizing agents. In other reactions, which typically involve the breaking of the carbon-oxygen bond, ethers are relatively inert.

#### Conditions to avoid

no data available

#### Incompatible materials

no data available

### Hazardous decomposition products

no data available

# **SECTION 11: Toxicological information**

### Acute toxicity

Oral: no data available

Inhalation: no data available

Dermal: no data available

#### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

# Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

## Reproductive toxicity

no data available

### STOT-single exposure

no data available

## STOT-repeated exposure

no data available

### Aspiration hazard

no data available

# **SECTION 12: Ecological information**

#### **Toxicity**

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

#### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

#### Mobility in soil

no data available

#### Other adverse effects

no data available

### **SECTION 13: Disposal considerations**

#### Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

### **SECTION 14: Transport information**

#### **UN Number**

ADR/RID: UN2615 (For reference only, please check.) IMDG: UN2615 (For reference only, please check.) IATA: UN2615 (For reference only, please check.)

#### **UN Proper Shipping Name**

ADR/RID: ETHYL PROPYL ETHER (For reference only, please check.)

IMDG: ETHYL PROPYL ETHER (For reference only, please check.)

IATA: ETHYL PROPYL ETHER (For reference only, please check.)

#### Transport hazard class(es)

ADR/RID: 3 (For reference only, please check.) IMDG: 3 (For reference only, please check.) IATA: 3 (For reference only, please check.)

### Packing group, if applicable

ADR/RID: II (For reference only, please check.)
IMDG: II (For reference only, please check.)
IATA: II (For reference only, please check.)

#### Environmental hazards

ADR/RID: No IMDG: No IATA: No

### Special precautions for user

no data available

### Transport in bulk according to IMO instruments

no data available

### **SECTION 15: Regulatory information**

Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)

Listed.

**EC Inventory** 

Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Not Listed.

China Catalog of Hazardous chemicals 2015

Listed.

New Zealand Inventory of Chemicals (NZIoC)

Not Listed.

(PICCS)

Listed.

Vietnam National Chemical Inventory

Not Listed.

IECSC)

Listed.

Korea Existing Chemicals List (KECL)

Listed.

#### **SECTION 16: Other information**

#### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

#### References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website:

http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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