



MATERIAL SAFETY DATA SHEET

ISOPROPYL ETHER, STABILIZED

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:
ISOPROPYL ETHER, STABILIZED, 98+%

Catalog Numbers:
15896-0000, 15896-0025

Synonyms:
Diisopropyl ether, DIPE, 2-Isopropoxypropane

Company Information:
LEONID CHEMICALS
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road
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SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	108-20-3
Chemical Name	:	Isopropyl ether
%	:	98+ %
EINECS#	:	203-560-6
Hazard Symbols	:	F
Risk Phrases	:	11 19

SECTION 3- HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Highly flammable. May form explosive peroxides. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

Potential Health Effects

Eye:

May cause severe eye irritation. Causes redness and pain.

Skin:

May cause skin irritation.

Ingestion:

May cause nausea and vomiting. Causes cough, sore throat, chest pain, and lightheadedness.

Inhalation:

May cause respiratory tract irritation. May cause effects similar to those described for ingestion. May cause narcotic effects in high concentration.

Chronic:

Prolonged or repeated skin contact may cause dermatitis.

SECTION 4- FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Un Listed

SECTION 5- FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire.

Extinguishing Media:

Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or chemical foam.

SECTION 6- ACCIDENTAL RELEASE MEASURES

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool.

SECTION 7 - HANDLING and STORAGE

Handling:

Use spark-proof tools and explosion proof equipment. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Use only in a chemical fume hood.

Storage:

Keep away from sources of ignition. Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container. Keep under a nitrogen blanket. Flammables-area.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

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

Personal Protective Equipment :

Eyes:

Wear safety glasses and chemical goggles if splashing is possible.

Skin:

Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Clear liquid
Color	:	APHA: 15 max
Odor	:	Not available.
pH	:	Not available.
Vapor Pressure	:	Not available.
Viscosity	:	0.38 mPas 25 deg C
Boiling Point	:	68 deg C @ 760.00mm Hg
Freezing/Melting Point	:	-85.5 deg C
Autoignition Temperature	:	443 deg C (829.40 deg F)
Flash Point	:	-29 deg C (-20.20 deg F)
Explosion Limits, lower	:	1.10 vol %
Explosion Limits, upper	:	21.00 vol %
Decomposition Temperature	:	Un Listed
Solubility in water	:	miscible with most common organic solven
Specific Gravity/Density	:	.7250g/cm3
Molecular Formula	:	(CH3)2CH12O
Molecular Weight	:	102.18

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, light, ignition sources, exposure to air.

Incompatibilities with Other Materials:

Strong oxidizing agents

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, peroxides.

Polymerization:

Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 108-20-3: Tz5425000

LD50/LC50:

CAS# 108-20-3: Inhalation, mouse: LC50 = 131 gm/m³; Inhalation, mouse: LC50 = 130800 mg/m³; Inhalation, rabbit: LC50 = 121 gm/m³;

Inhalation, rabbit: LC50 = 120600 mg/m³; Inhalation, rat: LC50 = 162 gm/m³; Inhalation, rat: LC50 = 161700 mg/m³; Oral, mouse: LD50 = 3600 mg/kg; Oral, rat: LD50 = 5880 mg/kg; Skin, rabbit: LD50 = 20 mL/kg.
Skin, rabbit: 363 mg open mild

Carcinogenicity:

Isopropyl ether -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fathead minnow (*Pimephales promelas*) LC50: 91.7 mg/l/96hr

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 - TRANSPORT INFORMATION

IATA

Shipping Name : DIISOPROPYL ETHER
Hazard Class : 3
UN Number : 1159
Packing Group : II

IMO

Shipping Name : DIISOPROPYL ETHER
Hazard Class : 3
UN Number : 1159
Packing Group : II

RID/ADR

Shipping Name : DIISOPROPYL ETHER
Hazard Class : 3
UN Number : 1159
Packing Group : II

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

F

Risk Phrases:

R 11 Highly flammable.

R 19 May form explosive peroxides.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

- S 16 Keep away from sources of ignition No smoking.
- S 29 Do not empty into drains.
- S 33 Take precautionary measures against static discharges.

WGK (Water Danger/Protection)

CAS# 108-20-3: 1

United Kingdom Occupational Exposure Limits

CAS# 108-20-3: OES-United Kingdom, TWA 250 ppm TWA; 1060 mg/m³ TWA

CAS# 108-20-3: OES-United Kingdom, STEL 310 ppm STEL; 1310 mg/m³ STEL

United Kingdom Maximum Exposure Limits

Canada

CAS# 108-20-3 is listed on Canada's DSL List.

CAS# 108-20-3 is listed on Canada's Ingredient Disclosure List.

Exposure Limits :

CAS# 108-20-3: OEL-AUSTRALIA:TWA 250 ppm (1050 mg/m³);STEL 310 ppm (1320 mg/m³)

OEL-BELGIUM:TWA 250 ppm (1040 mg/m³);STEL 310 ppm (1300 mg/m³)

OEL-DENMARK:TWA 250 ppm (1050 mg/m³)

OEL-FRANCE:TWA 250 ppm (1050 mg/m³)

OEL-GERMANY:TWA 500 ppm (2100 mg/m³)

OEL-THE NETHERLANDS:TWA 250 ppm (1050 mg/m³) JAN9

OEL-THE PHILIPPINES:TWA 500 ppm (2100 mg/m³) JAN9

OEL-POLAND:TWA 1000 mg/m³

OEL-RUSSIA:STEL 100 mg/m³

OEL-SWITZERLAND:TWA 250 ppm (1050 mg/m³)

OEL-TURKEY:TWA 500 ppm (2100 mg/m³)

OEL-UNITED KINGDOM:TWA 250 ppm (1050 mg/m³);STEL 310 ppm

OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV

OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

US FEDERAL

TSCA:

CAS# 108-20-3 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. 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 or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.