



MATERIAL SAFETY DATA SHEET

CONTACT : **LEONID CHEMICALS**
Leonid Chemicals Pvt Ltd
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road
Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Heptaldehyde, stabilized, 95%

Catalog Numbers:

H034

Synonyms:

Heptanal, Enanthaldehyde

Company Identification (USA):

LEONID CHEMICALS

62/A-2 2nd Stage, Industrial Suburb

Yeshwanthpur, Bangalore -22, INDIA

Ph- +91-80-23378354

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	111-71-7
Chemical Name	:	Heptaldehyde
%	:	95%
EINECS#	:	203-898-4
Hazard Symbols	:	XI
Risk Phrases	:	10 38

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable. Irritating to skin.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

Causes skin irritation. May be harmful if absorbed through the skin.

Ingestion:

May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation. May be harmful if inhaled.

Chronic:

Not available.



SECTION 4 - FIRST AID MEASURES

Eyes:

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

Skin:

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

Ingestion:

Get medical aid. Wash mouth out with water.

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:

Treat symptomatically and supportively.

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. Flammable liquid and vapor. Containers may explode if exposed to fire. Forms explosive mixtures with air.

Extinguishing Media:

Use water spray to cool fire-exposed containers. In case of fire, use carbon dioxide, dry chemical powder or appropriate 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. Avoid runoff into storm sewers and ditches which lead to waterways. 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.

Storage:

Keep away from heat, sparks, and flame. Store in a tightly closed container. Store in a dry area. Flammables-area. Store at room temperature.

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. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes:

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

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	: almost colorless
Odor	: penetrating odor
PH	: Not available.
Vapor Pressure	: 3 hPa @ 20 deg C
Viscosity	: 0.977 cP 15 deg C
Boiling Point	: 150 deg C @ 760 mmHg
Freezing/Melting Point	: -42 deg C
Autoignition Temperature	: 250 deg C (482.00 deg F)
Flash Point	: 48 deg C (118.40 deg F)
Explosion Limits, lower	: 1.10 vol %
Explosion Limits, upper	: 5.20 vol %
Decomposition Temperature	:
Solubility in water	: Insoluble.
Specific Gravity/Density	: 0.82
Molecular Formula	: C7H14O
Molecular Weight	: 114.19

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

Incompatible materials, light, ignition sources, exposure to moist

air or water.

Incompatibilities with Other Materials:

Oxidizing agents, strong reducing agents, strong bases, organic materials.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 111-71-7: MI6900000

LD50/LC50:

CAS# 111-71-7: Draize test, rabbit, eye: 100 uL Severe; Inhalation, rat: LC50 = >18400 mg/m³/4H; Oral, mouse: LD50 = 3200 mg/kg; Oral, rat: LD50 = 3200 mg/kg; Oral, rat: LD50 = 5000 mg/kg; Skin, rabbit: LD50 = >5 gm/kg.

Carcinogenicity:

Heptaldehyde -

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

See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: Guppy: 11 mg/l; 14 days; LC50Daphnia: 54 mg/l; 48H; EC50Algae: 16 mg/l; 48-96H; IC50logPOW: 2.8

Other

Biodegradable. This chemical is not likely to bioconcentrate. Avoid entering into waters or underground water.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

IATA

Shipping Name: n-HEPTALDEHYDE

Hazard Class: 3

UN Number: 3056

Packing Group: III

IMO

Shipping Name: HEPTALDEHYDE

Hazard Class: 3

UN Number: 3056

Packing Group: III

RID/ADR

Shipping Name: n-HEPTALDEHYDE
Hazard Class: 3
UN Number: 3056
Packing group: III

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Xi

Risk Phrases:

R 10 Flammable.

R 38 Irritating to skin.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 37 Wear suitable gloves.

WGK (Water Danger/Protection)

CAS# 111-71-7: No information available.

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 111-71-7 is listed on Canada's DSL List.

CAS# 111-71-7 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 111-71-7 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 7/16/1996 Revision #1 Date: 4/18/2000

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