



## 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:** N,N'-Diisopropylcarbodiimide, 99%

**Catalog Numbers:**

11521-0000, 11521-0050, 11521-0250, 11521-1000

**Synonyms:**

NA

**Company Identification:**

LEONID CHEMICALS  
62/A-2 2nd Stage, Industrial Suburb  
Yeshwanthpur, Bangalore -22, INDIA  
Ph- +91-80-23378354

### SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	693-13-0
Chemical Name	:	N,N'-Diisopropylcarbodiimide
%	:	99%
EINECS#	:	211-743-7
Hazard Symbols	:	T+
Risk Phrases	:	10 26 36/37/38 41 42/43

### SECTION 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

Flammable. Very toxic by inhalation. Irritating to eyes, respiratory system and skin. Risk of serious damage to eyes. May cause sensitization by inhalation and skin contact. Moisture sensitive.

**Potential Health Effects**

**Eye:**

Causes severe eye irritation. Risk of serious damage to eyes.

**Skin:**

Causes skin irritation. May be harmful if absorbed through the skin. May cause sensitization by skin contact.

**Ingestion:**

May cause irritation of the digestive tract. May be harmful if swallowed. Ingestion may cause headache, nausea, and vomiting.



**Inhalation:**

May be fatal if inhaled. Causes respiratory tract irritation. May cause respiratory sensitization.

**Chronic:**

Not available.

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**SECTION 4 - FIRST AID MEASURES**

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**Eyes:**

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

**Skin:**

Get medical aid immediately. 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:**

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

**Notes to Physician:**

NA

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**SECTION 5 - FIRE FIGHTING MEASURES**

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**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.

**Extinguishing Media:**

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

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**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.

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**SECTION 7 - HANDLING AND STORAGE**

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**Handling:**

Use spark-proof tools and explosion proof equipment. Do not get on skin and clothing. Do not breathe dust, vapor, mist, or gas. Use only in a chemical fume hood.

**Storage:**

Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

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**SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

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**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**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:**

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

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Physical State	: Liquid
Color	: clear colorless to yellow
Odor	: stench
PH	: Not available.
Vapor Pressure	: Not available.
Viscosity	: Not available.
Boiling Point	: 145 - 148 deg C @ 760 mmHg
Freezing/Melting Point	: Not available.
Autoignition Temperature	: Not available.
Flash Point	: 33 deg C ( 91.40 deg F)
Explosion Limits, lower	: Not available.
Explosion Limits, upper	: Not available.
Decomposition Temperature	NA
Solubility in water	: Decomposes.
Specific Gravity/Density	:0.81
Molecular Formula	C7H14N2
Molecular Weight	126.20

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**SECTION 10 - STABILITY AND REACTIVITY**

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**Chemical Stability:**

Not available.

**Conditions to Avoid:**

Incompatible materials, ignition sources, exposure to moist air or water.

**Incompatibilities with Other Materials:**

Oxidizing agents, acids.

**Hazardous Decomposition Products:**

Nitrogen oxides, carbon monoxide, carbon dioxide.

**Hazardous Polymerization:**

Has not been reported.

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**SECTION 11 - TOXICOLOGICAL INFORMATION**

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**RTECS#:**

CAS# 693-13-0: FF2175000

**LD50/LC50:**

Not available.

Inhalation, rat: LC50 = 20-25 ppm/4H

**Carcinogenicity:**

N,N'-Diisopropylcarbodiimide -

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

See actual entry in RTECS for complete information.

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**SECTION 12 - ECOLOGICAL INFORMATION**

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NA

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**SECTION 13 - DISPOSAL CONSIDERATIONS**

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

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**SECTION 14 - TRANSPORT INFORMATION**

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**IATA**

Shipping Name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.\* (forbidden to ship via passenger aircraft).

Hazard Class: 6.1

UN Number: 2929

Packing Group: I

**IMO**

Shipping Name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.

Hazard Class: 6.1  
UN Number: 2929  
Packing Group: I

**RID/ADR**

Shipping Name: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.  
Hazard Class: 6.1  
UN Number: 2929  
Packing group: I

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**SECTION 15 - REGULATORY INFORMATION**

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**European/International Regulations**

**European Labeling in Accordance with EC Directives**

Hazard Symbols: T+

**Risk Phrases:**

R 10 Flammable.  
R 26 Very toxic by inhalation.  
R 36/37/38 Irritating to eyes, respiratory system and skin.  
R 41 Risk of serious damage to eyes.  
R 42/43 May cause sensitization by inhalation and skin contact.

**Safety Phrases:**

S 16 Keep away from sources of ignition - No smoking.  
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S 28A After contact with skin, wash immediately with plenty of water.  
S 38 In case of insufficient ventilation, wear suitable respiratory equipment.  
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 693-13-0: No information available.

**United Kingdom Occupational Exposure Limits**

**United Kingdom Maximum Exposure Limits**

**Canada**

CAS# 693-13-0 is listed on Canada's NDSL List.

CAS# 693-13-0 is not listed on Canada's Ingredient Disclosure List.

**Exposure Limits**



**US FEDERAL**

TSCA

CAS# 693-13-0 is listed on the TSCA inventory.

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**SECTION 16 - ADDITIONAL INFORMATION**  
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MSDS Creation Date: 7/16/1996 Revision #2 Date: 2/22/2002

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.

  
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