

MATERIAL SAFETY DATA SHEET

CONTACT : LEONID CHEMICALS

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: N,N'-Dicyclohexylcarbodiimide, 99%

Catalog Numbers:

11390-0000, 11390-0010, 11390-1000, 11390-2500

Synonyms:

DCC

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 # : 538-75-0

Chemical Name : N,N'-Dicyclohexylcarbodiimide

% : 99% EINECS# : 208-704-1

Hazard Symbols : T+

Risk Phrases : 22 24 26 34 41 43

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Harmful if swallowed. Toxic in contact with skin. Very toxic by inhalation. Causes burns. Risk of serious damage to eyes. May cause sensitization by skin contact. Moisture sensitive. Highly toxic.

Potential Health Effects

Eve:

Causes eye burns.

Skin:

Causes skin burns. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Toxic in contact with skin.

Ingestion:

Harmful if swallowed. Causes gastrointestinal tract burns.

Inhalation:

May cause burns to the respiratory tract. Toxic if inhaled.



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Not available.

SECTION 4 - FIRST AID MEASURES

Eyes:

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

Ingestion:

Get medical aid immediately. 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

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.

Extinguishing Media:

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:

Vacuum or sweep up material and place into a suitable disposal container.

SECTION 7 - HANDLING AND STORAGE

Handling:

Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Store in a cool, dry place. Store in a tightly closed container. Corrosives 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. 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 : Solid
Color : colorless
Odor : sweetish odor
PH : Not available.
Vapor Pressure : 11mmHg @155 deg C

Viscosity : 5.81 cP @55 deg C

Boiling Point : 122 - 124 deg C @6mmHg Freezing/Melting Point : 33 - 35 deg C

Autoignition Temperature : 33 - 35 deg C
: Not available.

Flash Point : > 110 deg C (> 230.00 deg F)

Explosion Limits, lower : Not available. Explosion Limits, upper : Not available.

Decomposition Temperature
Solubility in water
Specific Gravity/Density
Molecular Formula
Molecular Weight

NA
:Reacts.
NA
C13H22N2
206.33

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, exposure to moist air or water.

Incompatibilities with Other Materials:

Strong oxidizing agents, oxidizing agents, acids.



Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization:

Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 538-75-0: FF2160000

LD50/LC50:

CAS# 538-75-0: Dermal, guinea pig: LD50 = 10 mL/kg; Inhalation, rat:

LC50 = 159 mg/m3/6H; Oral, mouse: LD50 = >800 mg/kg; Oral, rat: LD50

= 400 mg/kg.

Oral, rat: LD50 = 1579 mg/kg (male)

Oral, rat: LD50 = 1499 mg/kg

(female)

Skin, rat: LD50 = 79.4 mg/kg (male)

Skin, rat: LD50 = 70.7 mg/kg (female)

Carcinogenicity:

N,N'-Dicyclohexylcarbodiimide -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

NA

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

IATA

Shipping Name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.*

Hazard Class: 6.1 UN Number: 2928 Packing Group: II

IMO

Shipping Name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.

Hazard Class: 6.1



UN Number: 2928 Packing Group: II

RID/ADR

Shipping Name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.

Hazard Class: 6.1 UN Number: 2928 Packing group: II

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+

Risk Phrases:

R 22 Harmful if swallowed.

R 24 Toxic in contact with skin.

R 26 Very toxic by inhalation.

R 34 Causes burns.

R 41 Risk of serious damage to eyes.

R 43 May cause sensitization by skin contact.

Safety Phrases:

S 24 Avoid contact with skin.

S 26 In case of contact with eyes, rinse immediately

with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves

and eye/face protection.

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# 538-75-0: 2

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 538-75-0 is listed on Canada's DSL List. CAS# 538-75-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits



US FEDERAL

TSCA

CAS# 538-75-0 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 7/16/1996 Revision #1 Date: 3/02/2004

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.

