



## MATERIAL SAFETY DATA SHEET

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### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MSDS Name:** 4,4'-DIAMINOCTAFLUOROBIPHENYL, 98%

**Catalog Numbers:**

274

**Synonyms:**

Octafluorobenzidine,  
2,2',3,3',5,5',6,6'-Octafluoro-4,4'-bibenzenamine

**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#	:	1038-66-0
Chemical Name	:	4,4'-DIAMINOCTAFLUOROBIPHENYL, 98%
%	:	98
EINECS#	:	213-861-4
Haz Symbols	:	XI
Risk Phrases	:	36/37/38

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.

#### Potential Health Effects

The toxicological properties of this material have not been investigated. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation.

### 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.

#### Skin:

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

#### Ingestion:



Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:**

Remove from exposure and move to fresh air immediately.

**Notes to Physician:**

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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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**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:**

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal.

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## SECTION 7 - HANDLING and STORAGE

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**Handling:**

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:**

Store in a cool, dry place. Keep container closed when not in use.

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## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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**Engineering Controls:**

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

**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: Crystalline powder  
Color: white - light brown  
Odor: Not available.  
pH: Not available.  
Vapor Pressure: Not available.  
Viscosity: Not available.  
Boiling Point: Not available.  
Freezing/Melting Point: 175.00 - 179.00 deg C  
Autoignition Temperature: Not available.  
Flash Point: Not available.  
Explosion Limits, lower: Not available.  
Explosion Limits, upper: Not available.  
Decomposition Temperature:  
Solubility in water:  
Specific Gravity/Density:  
Molecular Formula: C<sub>12</sub>H<sub>4</sub>F<sub>8</sub>N<sub>2</sub>  
Molecular Weight: 328.15

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## SECTION 10 - STABILITY AND REACTIVITY

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Chemical Stability:  
Stable under normal temperatures and pressures.  
Conditions to Avoid:  
Strong oxidants.  
Incompatibilities with Other Materials:  
Not available.  
Hazardous Decomposition Products:  
Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, hydrogen fluoride gas, nitrogen.  
Hazardous Polymerization: Has not been reported.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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RTECS#:  
CAS# 1038-66-0 unlisted.  
LD50/LC50:  
Not available.

Carcinogenicity:

4,4'-DIAMINO-OCTAFLUOROBIPHENYL, 98% -  
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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**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  
No information available.  
IMO  
No information available.  
RID/ADR  
No information available.

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**SECTION 15 - REGULATORY INFORMATION**  
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European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Xi

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system  
and skin.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 1038-66-0: No information available.

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 1038-66-0 is listed on Canada's NDSL List.

CAS# 1038-66-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 1038-66-0 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 #0 Date: Original.

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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