



## MATERIAL SAFETY DATA SHEET

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Ph: +91-80-2337 8354, Fax: +91-80-2357

alpha,alpha-Dichlorotoluene, 95%

### SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:  
alpha,alpha-Dichlorotoluene, 95%

Catalog Numbers:  
40702-0000, 40702-0050, 40702-1000

Synonyms:  
Benzal chloride

Company Information:  
LEONID CHEMICALS  
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 2- COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	98-87-3
Chemical Name	:	alpha,alpha-Dichlorotoluene
%	:	95%
EINECS#	:	202-709-2
Hazard Symbols	:	T
Risk Phrases	:	22 23 37/38 40 41

### SECTION 3- HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Harmful if swallowed. Toxic by inhalation. Irritating to respiratory system and skin.  
Limited evidence of a carcinogenic effect. Risk of serious damage to eyes.

#### Potential Health Effects

Eye:  
May cause eye irritation and possible damage.

Skin:  
Causes skin irritation.

Ingestion:  
Harmful if swallowed.



Inhalation:

Causes respiratory tract irritation. Toxic if inhaled.

Chronic:

No information 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. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

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:

No information available.

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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

Use agent most appropriate to extinguish fire.

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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.

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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 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 minimize contact with skin.

#### Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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Physical State	:	Clear liquid
Color	:	Colorless to yellow
Odor	:	No information available.
PH	:	No information available.
Vapor Pressure	:	No information available.
Viscosity	:	No information available.
Boiling Point	:	No information available.
Freezing/Melting Point	:	-16 deg C
Autoignition Temperature	:	No information available.
Flash Point	:	88 deg C ( 190.40 deg F)
Explosion Limits, lower	:	No information available.
Explosion Limits, upper	:	No information available.
Decomposition Temperature	:	No information available.
Solubility in water	:	No information available.
Specific Gravity/Density	:	1.290
Molecular Formula	:	C7H6Cl2
Molecular Weight	:	161.03

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## SECTION 10 - STABILITY AND REACTIVITY

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### Chemical Stability:

Stable under normal temperatures and pressures.

### Conditions to Avoid:

Incompatible materials.

### Incompatibilities with Other Materials:

Strong oxidizing agents.

### Hazardous Decomposition Products:

Hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen.

### Hazardous Polymerization:

No information available.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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### RTECS#:

CAS# 98-87-3: CZ5075000

### LD50/LC50:

CAS# 98-87-3: Inhalation, mouse: LC50 = 32 ppm/2H; Inhalation, mouse: LC50 = 210 mg/m<sup>3</sup>; Inhalation, rat: LC50 = 61 ppm/2H; Inhalation, rat: LC50 = 400 mg/m<sup>3</sup>; Oral, mouse: LD50 = 2462 mg/kg; Oral, mouse: LD50 = 1400 mg/kg; Oral, rat: LD50 = 3249 mg/kg; Oral, rat: LD50 = 1400 mg/kg.

### Carcinogenicity:

alpha,alpha-Dichlorotoluene - OSHA: Possible Select carcinogen IARC: Group 2A carcinogen See actual entry in RTECS for complete information.

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## SECTION 12 - ECOLOGICAL INFORMATION

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No information available.

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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	:	BENZYLIDENE CHLORIDE
Hazard Class	:	6.1
UN Number	:	1886
Packing Group	:	II

IMO  
Shipping Name : BENZYLIDENE CHLORIDE  
Hazard Class : 6.1  
UN Number : 1886  
Packing Group : II

RID/ADR  
Shipping Name : BENZYLIDENE CHLORIDE  
Hazard Class : 6.1  
UN Number : 1886  
Packing Group : II

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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 22 Harmful if swallowed.  
R 23 Toxic by inhalation. R 37/38 Irritating to respiratory system and skin.  
R 40 Limited evidence of a carcinogenic effect.  
R 41 Risk of serious damage to eyes.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.  
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# 98-87-3: 3

United Kingdom Occupational Exposure Limits  
No information available.

United Kingdom Maximum Exposure Limits  
No information available.

Canada  
CAS# 98-87-3 is listed on Canada's NDSL List.  
CAS# 98-87-3 is listed on Canada's Ingredient Disclosure List.

Exposure Limits  
CAS# 98-87-3: OEL-FINLAND;Carcinogen  
OEL-GERMANY;Carcinogen  
OEL-RUSSIA:STEL 0.5 mg/m<sup>3</sup>  
OEL-SWEDEN;Carcinogen

US FEDERAL  
TSCA  
CAS# 98-87-3 is listed on the TSCA inventory.

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## SECTION 16 -ADDITIONAL INFORMATION

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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.



