



## MATERIAL SAFETY DATA SHEET

CINNAMALDEHYDE

### SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name:  
Cinnamaldehyde

Catalog Numbers: 15021-0000, 15021-0010, 15021-0050

Synonyms:  
3-Phenyl-2-propenal; 3-Phenylacrolein; 3-Phenylpropenal; Cinnamyl aldehyde; Cinnamic aldehyde.

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 #	:	104-55-2
Chemical Name	:	Cinnamaldehyde
%	:	100
EINECS#	:	203-213-9
Hazard Symbols	:	XI
Risk Phrases	:	36/37/38

### SECTION 3- HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.

#### Potential Health Effects

##### Eye:

Causes eye irritation.

##### Skin:

Causes skin irritation.

##### Ingestion:

Causes gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

##### Inhalation:

Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

##### Chronic:

No information found.

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## SECTION 4- FIRST AID MEASURES

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### Eyes:

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

### Skin:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

### Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

### 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:

Un Listed

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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. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

### Extinguishing Media:

Use foam, dry chemical, or carbon dioxide. 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:

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

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## SECTION 7 - HANDLING and STORAGE

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### Handling:

Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation.

### Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

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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:

Not available.

#### 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.

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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Physical State	:	Oil
Color	:	yellow
Odor	:	Strong cinnamon odor.
pH	:	Not available.
Vapor Pressure	:	1 mm Hg @ 76C
Viscosity	:	Not available.
Boiling Point	:	247 deg C (decomposes)
Freezing/Melting Point	:	-8 deg C
Autoignition Temperature	:	Not applicable.
Flash Point	:	71 deg C ( 159.80 deg F)
Explosion Limits, lower	:	Not available.
Explosion Limits, upper	:	Not available.
Decomposition Temperature	:	Not available.
Solubility in water	:	slightly soluble in water
Specific Gravity/Density	:	1.05
Molecular Formula	:	C9H8O
Molecular Weight	:	132.0554

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## SECTION 10 - STABILITY AND REACTIVITY

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### Chemical Stability:

Stable under normal temperatures and pressures. Stable under normal temperatures and pressures.

### Conditions to Avoid:

Excess heat, prolonged exposure to air.

### Incompatibilities with Other Materials:

Strong oxidizing agents and strong bases.

### Hazardous Decomposition Products:

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

### Polymerization:

Has not been reported.

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SECTION 11 - TOXICOLOGICAL INFORMATION  
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RTECS#:

CAS# 104-55-2: Gd6475000

LD50/LC50:

CAS# 104-55-2: Oral, mouse: LD50 = 2225 mg/kg; Oral, rat: LD50 = 2220 mg/kg.

Carcinogenicity:

Cinnamaldehyde -

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

See actual entry in RTECS for complete information.

Other:

Un Listed

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SECTION 12 - ECOLOGICAL INFORMATION  
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Un Listed

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SECTION 13 - DISPOSAL CONSIDERATIONS  
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Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

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SECTION 14 - TRANSPORT INFORMATION  
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IATA

Shipping Name : Not regulated.

Hazard Class :

UN Number :

Packing Group :

IMO

Shipping Name : Not regulated.

Hazard Class :

UN Number :

Packing Group :

ID/ADR

Shipping Name : Not regulated.

Hazard Class :

UN Number :

Packing Group :

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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:

Un Listed

WGK (Water Danger/Protection)

CAS# 104-55-2:

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 104-55-2 is listed on Canada's DSL List.

CAS# 104-55-2 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

Un Listed

US FEDERAL

TSCA

CAS# 104-55-2 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.