



MATERIAL SAFETY DATA SHEET

| 2-CHLORO-5-NITROPYRIDINE | | | |
|--|-------|--|--|
| SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION | | | |
| MSDS Name: 2-Chloro-5-Nitropyridine, 99% | | | |
| Catalog Numbers: AC109740000, AC109740050, AC109740250 | | | |
| Synonyms: Un Listed | | | |
| 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 # : 4548-45-2 Chemical Name : 2-Chloro-5-Nitropyr % : 99 % EINECS# : 224-908-3 Hazard Symbols : Un Listed Risk Phrases : Un Listed | idine | | |
| SECTION 3- HAZARDS IDENTIFICATION | | | |
| EMERGENCY OVERVIEW Appearance: light yellow to beige granules | | | |

Warning! Causes respiratory tract irritation. Irritant. Causes eye and skin irritation. May cause digestive tract irritation.

Target Organs: None known.

Potential Health Effects

Eye: Causes eye irritation. May cause chemical conjunctivitis. Skin: Causes skin irritation Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Inhalation: Causes respiratory tract irritation. Can produce delayed pulmonary edema



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Effects may be delayed. _____ 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. Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Indestion: Never give anything by mouth to an unconscious person. Get medical aid. 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. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Notes to Physician: Treat symptomatically and supportively. _____ 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Runoff from fire control or dilution water may cause pollution. Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam. Flash Point: Not applicable Autoignition Temperature: Not applicable. Explosion Limits, Lower: Not available. Upper: Not available. NFPA Rating:

(estimated) Health: 2; Flammability: 0; Instability: 0 _____

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.



SECTION 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage:

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

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.

Exposure Limits :

| Chemical Name | : | 2-Chloro-5-Nitropyridine |
|-------------------|---|--------------------------|
| ACGIH | : | nonelisted |
| NIOSH | : | none listed |
| OSHA - Final PELs | : | none listed |

OSHA Vacated PELs:

2-Chloro-5-Nitropyridine: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard En166.

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. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| Physical State | | Granules | |
|---------------------------|-----|-----------------------|--|
| Appearance | : | light yellow to beige | |
| Odor | | None reported. | |
| pH | : : | Not available. | |
| Vapor Pressure | : | Not available. | |
| Vapor Density | : | Not available. | |
| Evaporation Rate | : | Not available. | |
| Viscosity | : | Not available. | |
| Boiling Point | : | Not available. | |
| Freezing/Melting Point | : | 105.00 - 107.00 deg C | |
| Decomposition Temperature | : | Not available. | |
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| Solubility Specific Gravity/Density Molecular Formula Molecular Weight | : | insoluble Not available. C5H3CIN2O2 158.54 |
|---|-----------|---|
| SECTION 10 - STABILITY AND R | EACTIVITY | |
| Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions Conditions to Avoid: Incompatible materials, dust generation, excess heat, strong oxidants. Incompatibilities with Other Materials: Oxidizing agents. Hazardous Decomposition Products: Hydrogen chloride, nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen. Polymerization: Has not been reported. | | |
| SECTION 11 - TOXICOLOGICAL | INFORMATI | ON |
| RTECS#: CAS# 4548-45-2: US7175000 . | | |
| LD50/LC50: Not available. | | |
| Carcinogenicity: CAS# 4548-45-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. | | |
| Epidemiology: No information found. | | |
| Teratogenicity: No information found. | | |
| Reproductive Effects: No information found. | | |
| Mutagenicity: No information found | | |
| Neurotoxicity: No information found. | | |
| Other Studies: | | |

Un Listed. _____

SECTION 12 - ECOLOGICAL INFORMATION

No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS



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Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

| RCRAP-Series RCRAU-Series | None listed.None listed. | | | |
|--|--|--|--|--|
| SECTION 14 - TRANSPORT INFORMATION | | | | |
| US DOT Shipping Name Hazard Class UN Number Packing Group | Please contact Fisher Scientific for shipping information | | | |
| Canada TDG Shipping Name Hazard Class UN Number Packing Group | No information available | | | |
| SECTION 15 - REGULA | ATORY INFORMATION | | | |
| US FEDERAL | | | | |
| TSCA: CAS# 4548-45-2 is not I It is for research and de | isted on the TSCA inventory. evelopment use only. | | | |
| Health & Safety Repo None of the chemicals | orting List: s are on the Health & Safety Reporting List. | | | |
| Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rules. | | | | |
| Section 12b: None of the chemicals are listed under TSCA Section 12b. | | | | |
| TSCA Significant New None of the chemical | v Use Rule: s in this material have a SNUR under TSCA. | | | |
| CERCLA Hazardous Substances and corresponding Rqs None of the chemicals in this material have an RQ. | | | | |
| SARA Section 302 Extremely Hazardous Substances None of the chemicals in this product have a TPQ. | | | | |
| Section 313: No chemicals are repo | ortable under Section 313 | | | |
| Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors. | | | | |



Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE:

CAS# 4548-45-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65 California No Significant Risk Level: None of the chemicals in this product are listed.

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 22 Do not breathe dust. S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection) CAS# 4548-45-2: No information available.

Canada - DSL/NDSL None of the chemicals in this product are listed on the DSL or NDSL list

Canada - WHMIS his product has a WHMIS classification of D2B.

Canadian Ingredient Disclosure List

SECTION 16 - ADDITIONAL INFORMATION

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 event shall Fisher 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 Fisher has been advised of the possibility of such damages.

