MATERIAL SAFETY DATA SHEET 2-CHLORO-4- METHYLPYRIDINE

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name : 2-CHLORO-4- METHYLPYRIDINE
Synonyms : 2-Chloro-4-Picoline

Company Identification:
Alkali Metals Ltd.,
Plot B-5, Block III, IDA Uppal
Hyderabad, India - 500 039
Tel : 0091 40 2756 3002 / 2720 1179 Fax : 0091 40 2756 2634
Email : alikalimetals@alkalimetals.com

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
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<tbody>
<tr>
<td>3678-62-4</td>
<td>2-Chloro-4-methylpyridine</td>
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Hazard Symbol : XN
Risk phrases : 20/21/22 36/37/38

SECTION 3 - HAZARDS IDENTIFICATION

Emergency overview
Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system, and skin.

Potential Health Effects:
- **Eye**: Causes eye irritation
- **Skin**: Causes skin irritation. Harmful if absorbed through the skin. **Ingestion**: May cause irritation of digestive tract. Harmful if swallowed. **Inhalation**: Harmful if inhaled. Causes respiratory tract irritation.

SECTION 4 - FIRST AID MEASURES

- **Eyes**: Immediately flush eyes with plenty of water occasionally lifting the upper and lower eyelids. Get medical aid.
- **Skin**: Get medical aid. Flush skin with plenty of water while removing contaminated clothing and shoes.
- **Ingestion**: Get medical aid. Wash mouth out with water.
- **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**: Treat symptomatically and supportively.
SECTION 5 - FIRE FIGHTING MEASURES

General Information: As in any fire, wear a self-contained breathing apparatus 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.

Spills/Leaks: Absorb spill with inert material (like sand or earth) then place in suitable container.

SECTION 7 - HANDLING and STORAGE

Handling: Avoid contact with skin and eyes. Avoid breathing dust, vapor, mist or gas.

Storage: Keep away from sources of ignition. Store in a dry place. Store in a tightly closed container.

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: CAS # 3678-62-4: Not available

Personal Protective Equipment

Eyes: Wear chemical safety goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Wear appropriate respirators where necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: Colorless

Odor: Not available.

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 194-195 degC @ 760mmhg

Freezing/Melting Point: Not available

Autoignition Temperature: Not available.

Flash point: 89 deg C (192.20 deg F)

Explosion limits: Lower: Not available

Explosion limits: Upper: Not available

Solubility in water: Not available.

Specific Gravity/Density: 1.456

Molecular Formula: C6H6ClN

Molecular Weight: 127.57
SECTION 10 - STABILITY AND REACTIVITY

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, Carbon monoxide and, Carbon dioxide.

Hazardous Polymerization: Not available

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#: CAS # 3678-62-4: Non listed.
LD50/LC50: Not available.
Carcinogenicity: 2-Chloro-4-methylpyridine, Not listed as a carcinogen by ACGIH, IARC, NTP.

SECTION 12 - ECOLOGICAL INFORMATION

Not available

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

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<thead>
<tr>
<th>Shipping Name</th>
<th>IATA</th>
<th>IMO</th>
<th>RID / ADR</th>
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<td>Packing group</td>
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SECTION 15 - REGULATORY INFORMATION

European / International Regulations
European Labeling in accordance with EC directives
Hazard Symbols: XN

Risk Phrases:
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:
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.

WGK (Water Danger/Protection)
CAS# 3678-62-4: Not available.

Canada US federal TSCA
CAS # 3678-62-4 is not listed on the TSCA inventory.
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 way shall Alkali Metals 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 Alkali Metals has been advised of the possibility of such damages.

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