1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND THE COMPANY UNDERTAKING

Chemical Name: 2-(Chloromethyl)-4-methoxy-3,5-dimethylpyridine hydrochloride
Product Code: FC20257
Synonyms: 2-(Chloromethyl)-3,5-dimethyl-4-methoxypyridine hydrochloride, 2-(Chloromethyl)-4-methoxy-3,5-dimethyl-pyridine hydrochloride.
Recommended uses: For R&D purposes
Supplier: Carbosynth Ltd. 8&9 Old Station Business Park, Compton, Berkshire, RG20 6NE, UK.
Emergency contact numbers:
Telephone: +44 (0)1635 578 444
Fax: +44 (0)1635 579 444
Mobile: +44 (0)7887 998 634

2. HAZARDS IDENTIFICATION

Irritating to eyes and skin.

Classification:
Skin irritation (Category 2)
Eye irritation (Category 2A)

Labelling and precautionary statements:

Pictogram:

Signal word: Warning.

Hazard statement(s):
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statement(s):
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES:
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
2-(CHLOROMETHYL)-4-METHOXY-3,5-DIMETHYLPYRIDINE HYDROCHLORIDE

P337 + P313 If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
P362

Hazard symbol(s): Xi Irritant.
R-phrase(s): R36/38 Irritating to eyes and skin.
S-phrase(s): S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36 Wear suitable protective clothing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Formula: C₉H₁₃Cl₂NO Molecular weight: 222.11 CAS Number: 86604-75-3 EINECS Number: -

Synonyms: 2-(Chloromethyl)-3,5-dimethyl-4-methoxypyridine hydrochloride, 2-(Chloromethyl)-4-methoxy-3,5-dimethyl-pyridine hydrochloride.

4. FIRST AID MEASURES

Eye contact: Immediately flush eye with copious amounts of water for at least 15 minutes. Get medical aid immediately.
Skin contact: In case of contact remove contaminated clothing and immediately wash affected areas with copious quantities of water and soap for at least 15 minutes. Get medical aid immediately. Wash contaminated clothing before reuse.
Inhalation: Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. Get medical aid.
Ingestion: Do not induce vomiting unless advised to do so by a physician or Poison Control Center. Never give anything by mouth to an unconscious person. Wash out mouth with water provided person is conscious. Call a physician.
Notes to Physician: Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

Personal precautions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Extinguishing media: In case of fire use water spray, dry chemical powder, carbon dioxide, or alcohol-resistant foam.
6. ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.
Personal precautions: Wear self-contained breathing apparatus, eye protection and gloves. Keep personal hygiene. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental precautions: Do not let product enter the drains. Prevent further leakage or spillage if safe to do so.
Spills/Leaks: Sweep up and place the material in appropriate container for disposal without creating dust and dispose of as hazardous waste. Ventilate area, clean up spills and wash spill site after material pickup is complete, observing precautions in the Protective Equipment section.

7. HANDLING AND STORAGE

Handling: Wear appropriate protective clothing - see Section 8. Wash hands and face thoroughly after handling. Use only under a chemical fume hood. Use with adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Storage: Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from incompatible materials such as oxidizing agents. Store under inert atmosphere. Protect from light. Store at room temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protection equipment:
Eye protection: Wear appropriate protective safety glasses with side-shields conforming to EN166, chemical safety goggles or
face-shield (min. 8-inch) as described by OSHA’s eye and face protection regulations. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Wear appropriate protective gloves to prevent skin exposure, as defined in EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection: Appropriate protective clothing, overalls.

Respiratory protection: Where risk assessment indicates air-purifying respirators are required use a dust mask type P95 (US) or type P1 (EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. If the respirator is the sole means of protection, use a full-face supplied air respirator. Respirators and components must tested and approved under appropriate government standards - NIOSH (US) or CEN (EU).

Hygiene measures: Use good working practices. Wash hands and face thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White to off-white solid.</td>
</tr>
<tr>
<td>Odour</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>pH</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Melting point</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flammability</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flammability or explosive limits</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble (water).</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Slightly soluble (chloroform, methanol).</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Data not available/does not apply.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

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MATERIAL SAFETY DATA SHEET
2-(CHLOROMETHYL)-4-METHOXY-3,5-DIMETHYLPYRIDINE HYDROCHLORIDE

Chemical stability: Stable under recommended storage conditions.
Conditions to avoid: Data not available.
Incompatibilities with other materials: Strong oxidizing agents.
Hazardous decomposition products: Carbon oxides, nitrogen oxides (NOx), hydrogen chloride gas.
Hazardous polymerization: Data not available.

11. TOXICOLOGICAL INFORMATION

RTCS #: Data not available.
Acute toxicity: Data not available.
Skin corrosion/irritation: Data not available.
Serious eye damage/eye irritation: Data not available.
Respiratory or skin sensitization: Data not available.
Germ cell mutagenicity: Data not available.
Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity: Data not available.
Specific target organ toxicity - single exposure: Data not available.
Specific target organ toxicity - repeated exposure: Data not available.
Aspiration hazard: Data not available.
Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Target organs: Data not available.
Potential health effects:
Eye: Causes serious eye irritation.
Skin: May be harmful by skin absorption.
Causes skin irritation.
Ingestion: May be harmful if swallowed.
Inhalation: May be harmful if inhaled.
May cause respiratory tract irritation.
Chronic: No information found.
12. ECOLOGICAL INFORMATION

Data not available.

13. DISPOSAL CONSIDERATIONS

Observe all federal, state and local environmental regulations. Mix or dissolve the material in a combustible solvent and burn in chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

**ADR/RID**
Not classified as hazardous for transport.

**IMDG**
Not classified as hazardous for transport.

**IATA**
Not classified as hazardous for transport.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. ADDITIONAL INFORMATION

Further information on PPE:
European Standard & performance category markings:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN143</td>
<td>Particulates filter.</td>
</tr>
<tr>
<td>EN166</td>
<td>Standard applicable to all types of personal eye protectors.</td>
</tr>
<tr>
<td>EN374</td>
<td>Protects hands against chemicals and/or microorganisms.</td>
</tr>
</tbody>
</table>

Gas & vapour protection:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Organic vapours</td>
</tr>
<tr>
<td>B</td>
<td>Inorganic vapours</td>
</tr>
<tr>
<td>E</td>
<td>Acid gases</td>
</tr>
<tr>
<td>K</td>
<td>Ammonia and its derivatives</td>
</tr>
</tbody>
</table>

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