Material Safety Data Sheet (MSDS) for Mitomycin C

Section 1. Product and Company Information

Name: Mitomycin C
CAS Number: 50-07-7
Catalog Code: MI

Section 2. Composition/Information on Ingredient

EINECS/ELINCS: 200-008-6
Chemical Formula: C₁₅H₁₈N₄O₅
Chemical Class: RTECS CN0700000
TSCA

Section 3. Hazards Identification

Appearance: blue-gray powder.


Target Organs: Liver, bone marrow

Potential Health Effects:
- Eye: Causes eye irritation. May cause chemical conjunctivitis.
- Skin: Causes skin irritation.
- Ingestion: May be fatal if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver damage. May cause bone marrow depression. Prolonged absorption may cause anorexia, weight loss, vomiting, mild diarrhea, skin rash, alopecia, convulsions and anemia. Toxic if swallowed.
- Inhalation: Causes respiratory tract irritation. May cause pulmonary fibrosis and permanent damage. Can produce delayed pulmonary edema. May cause liver damage.
- Chronic: May cause cancer according to animal studies. Effects may be delayed.
- Chronic exposure may cause liver damage. Adverse reproductive effects have been reported in animals. Potential cancer hazard

Section 4. First Aid Measures

Eye Contact: Check for and remove contact lenses. Flush eyes with running water for at least 15 minutes separating eyelids. Seek medical attention immediately.

Skin Contact: Wash with soap and water for 15 minutes. Remove contaminated clothing and shoes. Seek medical attention immediately.

Inhalation: Remove from exposure. If breathing is difficult, administer oxygen. If breathing stops, administer artificial respiration. Seek medical attention immediately. Provide chemical label and MSDS if possible.
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Section 5. Fire and Explosion Data

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>Remove dentures and clear mouth. If person is conscious, rinse mouth with water. Call physician or poison control immediately. Provide chemical label and MSDS information if possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Combustion products</td>
<td>CO, CO₂, NO, NO₂</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Carbon Dioxide, Dry chemical powder, polymer foam, water spray</td>
</tr>
<tr>
<td>Special Firefighting Procedures</td>
<td>Use self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.</td>
</tr>
<tr>
<td>Unusual Fire/Explosion Hazards</td>
<td>None known</td>
</tr>
</tbody>
</table>

Section 6 - Accidental Release Measures

| Clean-up Procedures | Wearing appropriate protective gear as outlined under “Protective equipment” wipe up spill and place in sealed container and hold for disposal. Avoid raising dust. Ventilate the area and wash spill site after material has been removed． |
| Waste Disposal Method | Observe all Federal, State and Local regulations concerning the disposal of this product. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete |

Section 7 - Handling and Storage

| Protective Equipment | For spill clean-up, wear suitable protective clothing, chemical resistant rubber gloves, rubber boots, and chemical safety goggles. Self-contained breathing apparatus or NIOSH/MSHA approved respirator is recommended. |
| Storage and Handling | This product should be kept in a tightly closed container. This product should be handled only by qualified experienced professionals. Wash thoroughly after handling this material Store at -18°C |

Section 8 - Exposure Controls / Personal protection

| General | Use only in a chemical fume hood. Safety shower and eye bath. Use adequate ventilation to keep airborne concentrations low |
| Personal protective equipment | • Respiratory: Government approved respirator. • Hand: Compatible chemical-resistant gloves. • Eye: Chemical safety goggles. |

Section 9. Physical Data

| Appearance | white crystalline powder |
| Molecular Weight | 334 |
| Melting | 360°C |
| Solubility | Methanol, Water |

Section 10. Stability and Reactivity Data

| Stability | This material is stable if stored as directed |
| Conditions to Avoid | Excess heat, incompatible materials, strong oxidizers |
| Incompatibles | Reactive with oxidizing agents, acids, alkalis. |
| Hazardous polymerization | Will not occur |
Section 11 - Toxicological Information

RTECS#: CN0700000

Toxicity data
- Oral, mouse: LD50 = 23 mg/kg
- Oral, rat: LD50 = 30 mg/kg

Carcinogenicity
- IARC: Group 2B carcinogen
- California: carcinogen, initial date 4/1/88
- No data available on human carcinogenicity, however sufficient evidence of carcinogenicity in animals

Mutagenicity
Mutagenic effects have in experimental animals.

Reproductive Effects
Adverse reproductive effects have been reported in experimental animals

Eco-toxicological information: None Available

Section 12 - Ecological Data

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT
Not regulated as a hazardous material

Section 15 - Regulatory Information

US FEDERAL
TSCA: CAS# 50-07-7 is listed on the TSCA inventory This product is for research and development use only. It is subject to a SNUR which has specific requirements and restrictions. The specific citation for this product is 40CFR citation 721.5175

European Labelling in Accordance with EC Directives
Risk Phrases:
- R 36/37/38 Irritating to eyes, respiratory system and skin.
- R 45 May cause cancer.

Hazard Symbols: T

Section 16 - Other Information

DISCLAIMER
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