



Hangzhou Tianlong Biotechnology Co., Ltd.

Add: Room 1906, Fengqi Times Tower, No.338, Fengqi East Road, Hangzhou, Zhejiang, China.

MATERIAL SAFETY DATA SHEET

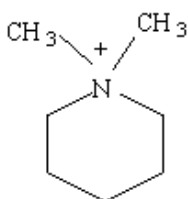
1. Chemical Product and company Identification

Product Name: Mepiquat Chloride

Molecular Formula: C₇H₁₆ClN

Molecular Weight: 149.66

Structural Formula:



Chemical Name: N,N-dimethylpiperidinium chloride

CAS No.: 24307-26-4

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

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2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Mepiquat Chloride	24307-26-4	98.0
Other ingredients		2.0

3. Hazards Identification

Symptoms of Acute Exposure: Irritation occurs upon eye contact. Inhalation of solution spray is irritating to nasal region and may result in slight narcosis. Ingestion of large amounts may result in muscle spasm.

Medical Conditions Likely to be Aggravated by Exposure: None known

Primary Routes of Exposure: Harmful if ingested, inhaled, absorbed into skin or if it comes into contact with skin or eyes.

4. First Aid Measures

Ingestion: Immediately give several glasses of water and induce vomiting by gagging the victim with a finger placed on the back of the victim's tongue. Give fluids until vomit is clear. If victim is unconscious or convulsing, do not induce vomiting or give anything by mouth. Get medical attention immediately.

Inhalation: Remove to fresh air. If not breathing, clear victim's airway and start mouth-to-mouth artificial respiration. If necessary, get immediate medical attention.

Eye Contact: Immediately wash eyes with running water for 15 minutes. If irritation develops, consult a physician.

Skin Contact: Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, consult a physician.

5. Fire-Fighting Measures

Flashpoint (test method): Not applicable

Flammable Limits (% in air): Not applicable

Autoignition Temperature: Not available

Appropriate Extinguishing Media: Use water fog, foam, CO₂, or dry chemical.

Fire Fighting Guidance: Firefighters should be equipped with self-contained breathing apparatus and turnout gear.

Unusual Fire, Explosion, and Reactivity Hazards: None

Hazardous Decomposition Products: Combustion may generate HCl

Unusual Fire, Explosion, and Reactivity Hazards: None

6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

In Case of Spills or Leaks: Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling And Storage

CAUTION: May be harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Do not contaminate water, food or feed by storage or disposal. Store in the original container and keep closed. Store containers in a cool, dry place.

Precautions in Storing: Do not contaminate water, food or feed by storage or disposal. Keep out of reach of children and animals. Keep from freezing.

Storage: Store in locked area in original container only, with lid tightly closed. Store separately from other pesticides and fertilizers, food and feed to prevent contamination. Use care to avoid puncturing container during storage or transit.

8. Exposure Controls / Personal Protection

Engineering Control Eye/Face: Use local exhaust (mechanical) to control vapors/mists during bulk transfer. Not required; use normal safety

precautions.

Skin Protection: Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

Respiratory Protection: Not required; however to avoid inhalation of excessive mist or vapors, wear a dust/mist approved respirator.

Additional Protection Information: Shower at the end of each workday. Emergency eyewash fountain should be located nearby. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Applicators/Handlers: Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

User Safety Recommendations: Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

9. Physical and Chemical Properties

Appearance: White to slight yellow crystalline solid

pH: Not available.

Vapor Pressure: 10mPa(20°C).

Evaporation Rate:Not available.

Viscosity: 0.01Pa(20°C).

Boiling Point: Not available.

Melting Point: 223°C

Solubility: Solubility in gram in every 100g solvent at 20°C. Water; >100g; Ethanol: <16.2g; Acetone, ether, ethyl acetate, cyclohexane and olive oil:<0.1g. Stable to heat.

Specific Gravity/Density:1.187g/cm³@20 °C.

Decomposition point: 285 °C.

10. Stability And Reactivity

Stability: Stable to heat

Hazardous Polymerization: Will not occur

Decomposition Products: Combustion may generate HCl

Hazardous Mixtures: None known

Conditions To Avoid: Do not allow product to freeze.

11. Toxicological Information

Acute oral (rat) LD50: 1490mg/kg

Acute dermal (rat) LD50: 7800mg/kg

Acute inhalation (rat) LC50: 3.2mg/l

Toxicity to Eye and Skin: No irritation to rabbit skin and eyes.

Accumulation Toxicity: Mepiquat chloride accumulates little in animal body and doesn't cause mutation, aberration and cancer under experimental conditions.

No abnormality occurs in the 3 - generation reproduction experiment of adult rat.
Chronic Toxicity: The no-effect dosage is 3000ppm in the 2-year chronic feeding experiment of adult rat

12. Ecological Information

Environmental Fate: No information found.

Environmental Toxicity: No information found.

13. Disposal Considerations

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions.

Container Disposal: Triple rinse container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Hazardous Information: None

14. Transport Information

Class: 9

UN No.: 3077

Packing group: III

15. Regulatory Information

Safe phrase: Keep locked up and out of reach children.

Keep away from food, drink and animal feeding stuffs.

Do not breathe vapour/spray.

Avoid contact with skin and eyes.

Wear suitable protective clothing, gloves and eye/face protection.

Avoid release to the environment.

16. Other Information

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.