

MCPA AMINE

TERRA INTERNATIONAL INC.
For Emergency Call: 800-228-5635 or
Chem Trec: 800-424-9300
Effective Date: 01/14/98

I. IDENTIFICATION

CHEMICAL NAME OF PRIMARY COMPONENT(S):
 Dimethylamine salt of 2-methyl-4-chlorophenoxyacetic acid

FORMULA: C₁₁H₁₆Cl NO₃
MOLECULAR WEIGHT: 245.7
SYNONYMS: MCPA
CAS # & NAME: 94-74-6 MCPA
EPA Reg No.: 9779-262

II. INGREDIENTS/SUMMARY OF HAZARDS

INGREDIENT(S)	CAS NUMBER	OSHA HAZARD (H)/NON-HAZARD (NH)	PERCENT
MCPA	94-74-6	H	48.89%
Formulation aids		NH	51.11%

	NFPA ^{1/}	HMIS ^{2/}
HEALTH	2	2
FIRE	0	0
REACTIVITY	0	0

1/ National Fire Protection Association Rating
 2/ Hazardous Materials Identification System
 (4 = Extreme/Severe 3 = High/Serious 2 = Moderate
 1 = Slight 0 = Minimum)

SARA TITLE III HAZARD CLASSIFICATION

IMMEDIATE (ACUTE) HEALTH	Yes
DELAYED (CHRONIC) HEALTH	Yes
FIRE	No
SUDDEN RELEASE OF PRESSURE	No
REACTIVE	No

III. PHYSICAL DATA

SPECIFIC GRAVITY: 1.126
BOILING POINT: Not determined
FREEZING POINT: Not determined
VAPOR PRESSURE: Not determined
SOLUBILITY IN WATER: 100%
APPEARANCE: Amber colored liquid
ODOR: Slight phenolic odor

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not applicable
FLAMMABLE LIMITS IN AIR: Not determined
AUTOIGNITION TEMPERATURE: Not determined
EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical for small fires and water fog or foam (alcohol, polymer or ordinary) for large fires. Water stream may spread flames.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.
SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should use self contained breathing apparatus and full turnout gear. Prevent runoff of fire water. Avoid exposure to smoke.

V. REACTIVITY DATA

STABILITY: Stable under normal conditions.
CONDITIONS TO AVOID: Excessive heat and freezing conditions.
MATERIALS TO AVOID: Mineral acid and strong bases.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride and carbon oxides.
HAZARDOUS POLYMERIZATION: Will not occur.

VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES**TOXICOLOGY DATA:**

Acute Oral LD₅₀ (rat): 550 mg/kg (technical MCPA)
Acute Dermal LD₅₀ (rabbit): > 1000 mg/kg (technical MCPA)
Acute Inhalation LC₅₀ (rat): Not determined
Eye Irritation (rabbit): Corrosive
Dermal Irritation (rabbit): Moderate irritant
Dermal Sensitization: Not determined
EXPOSURE LIMITS:

CHEMICAL NAME(S)	ACGIH (TLV)	OSHA (TWA)
MCPA	Not established	Not established

CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY: Not listed as a carcinogen by NRC, IARC or OSHA.

SIGNS OF POISONING: Nausea, vomiting, abdominal pain, muscle weakness, myotonia.

PRIMARY ROUTES OF ENTRY: Inhalation. skin/eye contact.

EFFECTS OF SINGLE OVEREXPOSURE:

Swallowing: Chlorophenoxy compounds are absorbed across the gut wall. They are not significantly fat storable. May cause nausea, vomiting, abdominal pain, muscle weakness, myotonia.

Skin Absorption: Chlorophenoxy compounds may be absorbed through the skin. May cause nausea, vomiting, abdominal pain, muscle weakness, myotonia.

Inhalation: Chlorophenoxy compounds are absorbed through the lung. Excessive exposure may cause irritation to the upper respiratory tract. Inhalation may cause intoxication, nausea and loss of balance.

Eyes: May cause eye irritation. Prolonged or repeated eye exposure to irritants can cause conjunctivitis.

EFFECTS OF REPEATED OVEREXPOSURE: Prolonged or repeated exposure may cause skin and eye irritation, nausea, vomiting, abdominal pain, muscle weakness, myotonia.

OTHER EFFECTS OF OVEREXPOSURE: Excessive exposure may cause liver, kidney, blood, gastrointestinal, muscular and respiratory effects. Epidemiological studies revealed a significant increase in soft-tissue sarcomas, malignant lymphomas, and bronchial carcinomas in workers exposed to chlorophenoxy herbicides.

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate preexisting skin conditions. Inhalation of mists may aggravate preexisting respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES:

Swallowing: Call a physician or Poison Control Center. Do not induce vomiting. If patient is alert and not convulsing give large quantities of milk, egg whites, gelatin solution or water.

Skin: Wash affected area with plenty of soap and water. Remove contaminated clothing. Launder contaminated clothing separately.

Inhalation: Remove victim to fresh air. If not breathing, administer artificial respiration. GET MEDICAL ATTENTION.

Eyes: Hold eyelids open and flush with a steady stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

NOTES TO PHYSICIAN: No specific antidote is available. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. If large amounts (greater than 1ml/kg body weight) of the product have been ingested, the stomach should be evacuated by gastric intubation with the aid of a cuffed endotracheal tube. After removal of stomach contents, wash stomach by instilling 30-50 g of activated charcoal in 3-4 ounces of water through the stomach tube and again remove stomach contents. Avoid oily laxatives.

This product contains a phenoxy herbicide. Myotoxic effects may include muscle fibrillation, myotonia, and muscular weakness. Ingestion of massive doses may result in persistent fall of blood pressure. Myoglobin and hemoglobin may be found in urine. Elevations in lactate dehydrogenase (LDH), SGOT, SGPT and aldolase indicate the extent of muscle damage. It has been suggested that overexposure in humans may affect both the central and peripheral nervous systems.

The acute effects on the central nervous system resemble those produced by alcohol or sedative drugs. In isolated cases, peripheral neuropathy and reduced nerve conduct velocities have been reported although these observation may be related to other factors.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dike the area using absorbent or materials such as sand or clay. Recover and contain as much product as possible using absorbent. Clean spill area using a solution of water and detergent. Collect and contain wash water and all contaminated absorbent for disposal. If spilled on the ground, the affected area should be excavated to a depth of 1 - 2 inches. Prevent the spilled product or washings from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

CONTAINER DISPOSAL: Dispose of in an approved facility according to federal, state and local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a cool, dry area away from sources of heat or ignition.

VIII. SPECIAL PROTECTION INFORMATION**PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:**

- Manufacture or formulation of this product.
- Repair and maintenance of contaminated equipment.
- Clean up of leaks and spills.
- Any other activity that may result in hazardous exposures.
- Refer to product label for PPE required for labeled use.

RESPIRATORY PROTECTION: Use NIOSH/MSHA-approved respirator for organic vapors. Use positive-pressure contained breathing apparatus where emergency conditions or where exposure limits are exceeded.

VENTILATION: Local exhaust.

PROTECTIVE CLOTHING: Chemical resistant gloves, coveralls, apron and foot coverings.

EYE PROTECTION: Safety goggles.

USER SAFETY RECOMMENDATIONS: Safety showers and eye wash should be easily accessible.

IX. REGULATORY STATUS

TSCA INVENTORY STATUS:

TRANSPORTATION STATUS:

DOT INFORMATION: Not regulated

Container Capacity	Proper Shipping Name	Hazard Class	Label	Packing Group

SARA TITLE III

Section 302-304 (40 CFR 350):

Extremely Hazardous Substance (EHS): Not listed

Section 312, Reporting (40 CFR 370):

SARA/OSHA Hazardous Chemical Reporting Quantity: 10,000 pounds

Section 313, Toxic Chemicals: Not listed

Reportable Quantity (RQ): Not listed

RCRA HAZARDOUS WASTE: Not listed

International Right-To-Know Regulations:

X. REFERENCES

1) Supplier sponsored studies.

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