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Emergency Phone (Chemtree): (800) 424-9300

Information Phone: (800) 345-3330

Date Issued: 9/11/97

Supersedes: 12/ 1/91

Product Code: B178R

MSDS Number: 178-1

MATERIAL SAFETY DATA SHEET:

Triamine

1. INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS #</u>	<u>Weight %</u>	<u>Common Name</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid	2008-39-1	16.30%	DMA Salt of 2,4-D	10 mg/m3 (for 2,4-D Acid)	NA
Dimethylamine Salt of 2-(2-Methyl-4-Chlorophenoxy) propionic Acid	32351-70-5	16.40%	DMA Salt of MCPP	N/A	N/A
Dimethylamine Salt of 2-(2,4-Dichlorophenoxy)propionic Acid	53404-32-3	16.20%	DMA Salt 2,4-DP	N/A	N/A
Water and Sequesterents	N/A	51.10%	Inert Ingredients	N/A	N/A
	Total	100.00%			

2. HEALTH DATA

PRIMARY ROUTE OF ENTRY:

Dermal/ Eye: Yes **Oral:** Yes **Inhalation:** No

SYMPTOMS OF OVEREXPOSURE:

Nonspecific: muscle weakness, lethargy, loss of appetite, abdominal pains, headache, or shortness of breath.

ACUTE HEALTH EFFECTS

Inhalation:

Avoid inhaling vapors or mist. May irritate the respiratory tract or cause dizziness.

Eyes:

Direct and prolonged eye exposure to the concentrated product may cause corneal opacity, irreversible eye damage.

Skin:

Prolonged exposure may cause mild skin irritation and dermal sensitization reactions. Harmful if absorbed through skin, may cause similar symptoms to ingestion.

Ingestion:

May cause muscle weakness, nausea, diarrhea, and abdominal pain. Fall in blood pressure or myotonia (prolonged muscular spasm) may occur under extreme exposure conditions. Can be fatal.

TOXICOLOGICAL DATA

Acute Oral LD50:

2.3 g/ kg (male rats); 1.8 g/ kg (female rats)

Acute Dermal LD50:

> 2 g/ kg (rabbits)

Acute Inhalation LC50:

N/D

Eye Irritation:

severe irritation; corrosive (rabbits)

Dermal Irritation:

mild irritation (rabbits)

Dermal Sensitization:

is a sensitizer (guinea pigs)

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Skin exposure may aggravate existing skin conditions. Exposure to mist may aggravate existing respiratory conditions.

CHRONIC HEALTH EFFECTS:

Agency Listing Carcinogen

<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
No	No	No

Repeated or prolonged overexposure to phenoxy herbicides may cause liver, kidney, gastrointestinal or muscular system effects. The EPA's Science Advisory Panel has given 2,4-D a class D classification (not classifiable as to human carcinogenicity). Various epidemiological studies have yielded conflicting results with the majority being negative. The current scientific consensus is that there is no proven causal association between 2,4-D and cancer. Recent studies have not shown 2,4-D to be a mutagen or teratogen. Other chronic effects of 2,4-DP and MCPP have not been determined.

3. FIRST AID MEASURES**EYE CONTACT:**

Hold eyelids open and flush entire eye with a steady, gentle stream of water for 15 minutes. Get medical attention at once.

INHALATION:

Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth to mouth. Get medical attention.

INGESTION:

Call a physician or Poison Control Center. Drink promptly a large quantity of milk, egg whites or gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol. Do not induce vomiting or give anything by mouth to an unconscious person.

SKIN CONTACT:

Wash with plenty of soap and water. Get medical attention.

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate gastric lavage. If large amounts of the product were ingested, the stomach should be emptied by gastric intubation.

4. FIRE FIGHTING MEASURES**FLASH POINT (F):**

N/A

FLASH POINT METHOD USED:

None- aqueous solution

Use CO₂ or dry chemical for small fires and foam, water fog, or water stream for large fires. Use water spray to cool closed containers.

COMBUSTION PRODUCTS:

May include, but are not limited to: hydrogen chloride and nitrogen oxides.

SPECIAL FIRE FIGHTING PROCEDURES:

May produce toxic and noxious fumes under extreme fire conditions. Use positive pressure self-contained breathing apparatus and acid resistant protective clothing. Any water used to extinguish the fire should be contained by diking to prevent contamination of the public water system.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Drums of product will burst from steam pressure under prolonged fire conditions.

See Section 13, REGULATORY INFORMATION, for NFPA ratings.

5. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:

Wear the suggested safety equipment when cleaning large spills (section 7). Surround with impervious material such as dirt to prevent run-off. Absorb product with an inert absorbent such as clay granules or wood shavings. Contain all affected material in a closed, marked container for proper disposal. Treat contaminated area with detergent and water. 2,4-D spills are subject to CERCLA (Superfund) reporting requirements. Reportable Quantity (RQ) = 77 gallons of Triamine.

6. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Always use original container to store pesticides in a secured warehouse or storage building. Do not store near seeds, fertilizers, insecticides, or fungicides. Store at temperatures above 32 F. If allowed to freeze, remix before using. Freezing does not alter this product. Containers should be opened in well ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not contaminate water, food, or feed by storage or disposal.

WORK HYGIENIC PRACTICE:

Wash nondisposable gloves thoroughly with soap and water before removing. After using this product, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower.

7. EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

Respiratory protection is not normally required. Use a NIOSH/MSHA approved respirator when directly exposed to mist.

VENTILATION:

Open ventilation. Reduce all mist with local exhaust.

PROTECTIVE GLOVES:

Chemical-resistant gloves

EYE PROTECTION:

Wear splash goggles or face shield when handling.

OTHER PROTECTIVE EQUIPMENT:

Long sleeved shirt, long pants, socks and shoes. Persons engaged in open pouring must wear coveralls or a chemical resistant apron. (See Precautionary Statements on product label for details)

8. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:

Dark amber liquid, amine odor

SOLUBILITY IN WATER:

100% in water

BOILING POINT (F):

207

VAPOR PRESSURE (mm Hg @ 20 C):

that of water

SPECIFIC GRAVITY (H₂O = 1):

1.138

pH:

7.5 - 8.5

FREEZING POINT (F):

32

POUNDS PER GALLON:

9.50

9. STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITIONS TO AVOID:

Avoid fire conditions

INCOMPATIBILITY:

Strong oxidizers or acids

HAZARDOUS BYPRODUCTS: None

HAZARDOUS POLYMERIZATION: Will Not Occur

10. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

2,4-D, MCP, and 2,4-DP each have a relatively short half-life of, on average, 6-9, 5-17, and 10 days, respectively. Phenoxy herbicides are readily degraded into nontoxicological substances by soil microbes and aquatic microorganisms.

ECOTOXICITY:

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants.

11. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL:

Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixtures or rinsate is a violation of Federal law and may contaminate groundwater. If product cannot be disposed of by use according to the label, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Triple rinse (or equivalent) and offer for recycling, or puncture and dispose of in a sanitary landfill. Plastic containers are also disposable by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

12. TRANSPORTATION INFORMATION

220 gal, 260 gal
(All smaller container sizes are not DOT regulated)

HAZARD CLASS: 9

UN NUMBER: UN 3082

PACKING GROUP: III

GUIDE NUMBER: 171

PROPER SHIPPING NAME: RQ, Environmentally Hazardous Substances, Liquid, N.O.S. (2,4-D Salt)

13. REGULATORY INFORMATION

SARA TITLE III; Section 311/312:

An immediate and delayed health hazard.

REPORTABLE QUANTITY (RQ):

100 lbs of 2,4-D acid equivalent or approximately 77 gallons of Triamine. For releases greater than the RQ, contact the National Response Center at (800) 424-8802.

SARA TITLE III; Section 313- This product contains the following substances subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

N/A

HMIS INFORMATION	
HEALTH:	2
	1
REACTIVITY:	0
PROTECTIVE:	D

NFPA INFORMATION	
TOXICITY:	2
FIRE:	1
REACTIVITY:	0
SPECIAL:	N

The information given herein is to the best of our knowledge true and accurate. No warranty, however, expressed or implied, is made.