

NUFARM AMERICAS INC.

1333 Burr Ridge Parkway, Suite 125A
Burr Ridge, IL 60527-0866

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

Information: (800) 345-3330

Date Issued: 8/29/03

Supersedes: 9/25/97

Product Code: TBA

MSDS Number: 206

MATERIAL SAFETY DATA SHEET:

Riverdale® Triamine II

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-Methyl-4-Chlorophenoxyacetic Acid	2039-46-5	17.15%	DMA Salt of MCPA	N/A	N/A
Dimethylamine Salt of (+)-R-2-(2-Methyl-4-Chlorophenoxy)propionic Acid	66423-09-4	8.47%	DMA Salt of MCPP-p	N/A	N/A
Dimethylamine Salt of (+)-R-2-(2,4-Dichlorophenoxy)propionic Acid	104786-87-0	8.34%	DMA Salt of 2,4-DP-p	N/A	N/A
Other ingredients including water* and sequesterents	*7732-18-5	66.04%	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:

This product is considered a mild skin irritant and is not a dermal sensitizer. 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:

1.546 g/ kg; (male rats); 1.599 g/ kg (female rats)

Acute Dermal LD50:

>2.0 g/ kg (rabbits)

Acute Inhalation LC50:

no mortality at maximum attainable concentration of 3.3 mg/ l (rabbits)

Eye Irritation:

corneal involvement and severe irritation persisting > 21 days (rabbits)

Dermal Irritation:

no irritation at 72 hours (rabbits)

Dermal Sensitization:

not 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 available evidence on MCPA indicates that it is not a carcinogen or mutagen. No conclusions can be drawn concerning the teratogenic risk of MCPA. The chronic effects of MCPP-p and 2,4-DP-p are undetermined.

3. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

IF IN EYES:

Hold eyelids open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED:

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING:

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

IF INHALED:

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of 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

EXTINGUISHING MEDIA:

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:

Decomposition 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:

When cleaning large spills, wear the suggested safety equipment (see 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, labeled container for proper disposal. Treat contaminated areas with detergent and water.

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 thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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 mixing or loading.
OTHER PROTECTIVE EQUIPMENT:	Long sleeved shirt, long pants, socks and shoes are recommended.

8. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Dark amber liquid, slight amine odor
SOLUBILITY IN WATER:	100% dispersible in water.
BOILING POINT (F):	212°
VAPOR PRESSURE (mm Hg @ 20 C):	N/D
SPECIFIC GRAVITY (H2O=1):	1.128
pH	7.5 to 8.5
FREEZING POINT (F):	32°
POUNDS PER GALLON:	9.40

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

MCPA, MCPP-p, and 2,4-DP-p each have a relatively short half-life of, on average 20 to 60 days, 5 to 17 days, and 10 days, respectively. The active ingredients in this product are readily degraded by soil microbes and aquatic microorganisms.

11. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law. If this 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.

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

DOT REGULATED CONTAINER SIZE:

NA

PROPER SHIPPING NAME:

Compound, Weed Killing, Liquid, Not DOT Regulated

13. REGULATORY INFORMATION

SARA TITLE III; Section 311/312:

An immediate and delayed health hazard.

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:

REPORTABLE QUANTITY (RQ):

N/A

N/A

HMIS INFORMATION	
HEALTH:	2
FLAMMABILITY:	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.