

# MILLENNIUM ULTRA™ PLUS

Riverdale

1333 Burr Ridge Parkway

Suite 125A

Burr Ridge, IL 60521-0866

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

Information: (800) 345-3330

Date Issued: 6/1/01

Supersedes: New

Product Code: 3821-RIV

MSDS Number: 382

## 1. INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %	Common Name
Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid	2008-39-1	6.02%	DMA Salt of 2,4-D
Monoethanolamine Salt of 3,6-Dichloro-2-Pyridinecarboxylic Acid	57754-85-5	0.82%	Clopyralid Acid
Dimethylamine Salt of Dicamba (3,6-Dichloro-o-Anisic Acid)	2300-66-5	0.75%	DMA Salt of Dicamba
Monosodium Acid Methanearsonate	2163-80-6	18.00%	MSMA
Other ingredients including water and sequestrants		74.41%	Inert Ingredients
Total		100.00%	

Chemical Name	OSHA PEL	ACGIH TLV
Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid	10 mg/m3 (2,4-D Acid)	N/A
Monoethanolamine Salt of 3,6-Dichloro-2-Pyridinecarboxylic Acid	N/A	N/A
Dimethylamine Salt of Dicamba (3,6-Dichloro-o-Anisic Acid)	N/A	N/A
Monosodium Acid Methanearsonate	N/A	0.5 mg/m3
Other ingredients including water and sequestrants	N/A	N/A

## 2. HEALTH DATA

### PRIMARY ROUTE OF ENTRY:

**Dermal/Eye:** Yes

**Oral:** Yes

**Inhalation:** No

**SYMPTOMS OF OVEREXPOSURE:** Nonspecific: muscle weakness or pain, lethargy, loss of appetite, abdominal pains, headache, or shortness of breath, burning of throat or colicky stomach. Garlic odor of breath or skin.

### 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 involvement or irritation.

**Skin:** This product is considered a moderate skin irritant and is not a dermal sensitizer. Repeated or prolonged exposure may cause effects similar to those caused by ingestion.

**Ingestion:** Moderate to low oral toxicity. May cause muscle weakness, nausea, diarrhea, and abdominal pain. Fall in blood pressure or myotonia (prolonged muscular spasm) may occur under extreme exposure conditions. Harmful if swallowed.

### TOXICOLOGICAL DATA

**Acute Oral LD50:** >0.5 g/kg (male rats); 3.078 g/kg (female rats)

**Acute Dermal LD50:** >5000 mg/l (rabbits)

**Acute Inhalation LC50:** >2.68 mg/l (rats)

**Eye Irritation:** Corneal involvement or irritation clearing in 7 days or less (rabbits)

**Dermal Irritation:** Moderate 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:** Chronic overexposure to 2,4-D and dicamba may cause liver, kidney, gastrointestinal or muscular system effects. The EPA's Science Advisory Panel has given 2,4-D and dicamba a class D classification (not studies on 2,4-D 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. Animal studies with dicamba have not demonstrated carcinogenic, teratogenic, or reproductive effects with the exception of slightly reduced fetal body weights and post implantation losses at the Maximum Tolerated Dose level. The majority of evidence suggests that it is not a mutagen. Clopyralid did not cause a cancer in long term animal studies. Clopyralid was a teratogen at doses severely toxic to the mother, but not at doses still several times greater severely toxic to the mother, but not at doses still several times greater than those expected during normal exposure.

NTP	Agency Listing Carcinogen	
	IARC	OSHA
NO	NO	NO

## 3. FIRST AID MEASURES

**EYE CONTACT:** Hold eye open and rinse slowly and gently with water for 15-20 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.

**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 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

**SKIN CONTACT:** Wash with plenty of soap and water. Get medical attention if irritation persists.

## 4. FIRE FIGHTING MEASURES

**FLASH POINT (F):** N/A

**FLASH POINT METHOD USED:** None-aqueous solution.

**EXTINGUISHING MEDIA:** Use CO<sub>2</sub> 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, market container for proper disposal. Treat contaminated areas with detergent and water. 2,4-D spills are subject to CERCLA (Superfund) reporting requirements. Reportable Quantity (RQ) = 201 gallons of Millennium Ultra™ Plus.

## 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 containers of fertilizers, seeds, or other pesticides. Store at temperatures above 32F. 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:** After using this product, rinse gloves before removing, 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. (Recommended)

**PROTECTIVE GLOVES:** Rubber or chemical-resistant gloves. (See Precautionary Statements on product label for details)

**EYE PROTECTION:** Wear splash goggles, face shield, or safety glasses with front, brow, and temple protection. (Optional)

**OTHER PROTECTIVE EQUIPMENT:** Long sleeved shirt, long pants, socks, and shoes. Persons engaged in open pouring must wear coveralls or a chemical resistant apron.

## 8. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE AND ODOR:** White color liquid, slightly phenoxy odor

**SOLUBILITY IN WATER:** 100% in water

**BOILING POINT (F):** >212°F

**VAPOR PRESSURE (mmHg@20C):** N/D

**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** 1.190

**pH:** 5.5

**FREEZING POINT:** 32°F

**POUNDS PER GALLON:** 9.91

## 9. STABILITY AND REACTIVITY

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Avoid fire conditions. Do not store or use in aluminum equipment.

**INCOMPATIBILITY:** Strong oxidizers or acids

**HAZARDOUS BYPRODUCTS:** Reducing agents may release arsine gas

**HAZARDOUS POLYMERIZATION:** Will Not Occur

## 10. ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE:** 2,4-D, clopyralid and dicamba each have a relatively short half-life of, on average, 6-9 days, 40 days, and 1-4 weeks, respectively. The active ingredients in this product are all biodegraded by soil microbes. Terrestrial dissipation, DT 55d, DT for cacodylic acid (primary metabolite) 88d. MSMA and cacodylic acid are found primarily in upper 6 inches of soil. K 250 (sandy soil) to 2850 (silty loam); K 0.5 (sandy soil) to 39.4 (sandy loam).

**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 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) adding rinsate to spray tank. Then 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:**

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 201 gallons of Millennium Ultra™ Plus. For releases greater than the RQ, contact the National Response Center at (800) 424-8802.

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

**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**

Dimethylamine of Dicamba CAS#: 2300-66-5

NFPA INFORMATION	
TOXICITY:	3
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.

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