

# Riverdale

425 West 194th Street  
Glenwood IL 60425

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

Information Phone: (800) 345-3330

Date Issued: 11/ 5/97

Supersedes: 11/ 5/97

Product Code: B316R

MSDS Number: 316

MATERIAL SAFETY DATA SHEET:

## Turflon II Amine

### 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	34.20%	DMA Salt of 2,4-D	10 mg/ m3 (2,4-D Acid)	N/A
Triethylamine Salt of 3,5,6-Trichloro-2-Pyridmyloxyacetic Acid	057213-69-1	15.20%	Triclopyr	N/A	N/A
Other ingredients (water, emulsifier, and unreacted triethylamine*)	*121-44-8	50.60%	N/A	N/A	N/A
	<b>Total</b>	<b>100.00%</b>			

### 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. Vapors of amines may cause swelling of the cornea resulting in visual disturbances such as blurred, smoky, or halo vision.

**Skin:**

Short single exposure not likely to cause irritation, but prolonged exposure may cause severe skin irritation. Prolonged exposure may allow the product to be absorbed in harmful amounts and may cause symptoms similar to those caused by 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:**

1576 mg/ kg (male rats); 1743 mg/ kg (female rats)

**Acute Dermal LD50:**

1744 mg/ kg (male rabbits); 1892 mg/ kg (female rabbits)

**Acute Inhalation LC50:**

> 2.0 mg/ l, highest attainable concentration (rats)

**Eye Irritation:**

severe irritation with possibly permanent corneal injury

**Dermal Irritation:**

severe irritation with prolonged exposure

**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	Yes	No

Repeated or prolonged overexposure to the active ingredients in this product 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. Animal studies have shown that triclopyr is not a carcinogen or teratogen, and that it does not interfere with reproduction. Mutagenicity tests have been negative. This product contains ethanol (0.6%). Epidemiology studies provide evidence that drinking of alcoholic beverages (containing ethanol) is associated with cancer, and IARC has classified alcoholic beverages as carcinogenic to humans.

### 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, preferably an ophthalmologist.

**INHALATION:**

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

**INGESTION:**

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

**SKIN CONTACT:**

Wash affected area with soap and water. If irritation persists, 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):**

None up to 202 F

**FLASH POINT METHOD USED:**

Setaflash

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) = 100 lbs of 2,4-D or approximately 36 gallons of Turflon II Amine.

## 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 28 F. If allowed to freeze, rewarm to 40 F, remix thoroughly 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 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 protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## 7. EXPOSURE CONTROL/PERSONAL PROTECTION

	Respiratory protection is not normally required. Use a NIOSH/MSHA approved respirator when directly exposed to mist.
<b>VENTILATION:</b>	Open ventilation. Reduce all mist with local exhaust.
<b>PROTECTIVE GLOVES:</b>	Rubber or chemical-resistant gloves (See Precautionary Statements on product label for details.)
<b>EYE PROTECTION:</b>	Wear splash goggles or face shield when handling.
<b>OTHER PROTECTIVE EQUIPMENT:</b>	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

<b>APPEARANCE AND ODOR:</b>	Clear amber liquid, mild amine odor
<b>SOLUBILITY IN WATER:</b>	Infinite in water
<b>BOILING POINT ( F ):</b>	178
<b>VAPOR PRESSURE (mm Hg @ 20 C):</b>	N/D
<b>SPECIFIC GRAVITY (H2O = 1):</b>	1.173
<b>pH:</b>	7.5 - 8.5
<b>FREEZING POINT ( F ):</b>	28
<b>POUNDS PER GALLON:</b>	9.77

## 9. STABILITY AND REACTIVITY

<b>STABILITY:</b>	Stable
<b>CONDITIONS TO AVOID:</b>	Avoid heat conditions
<b>INCOMPATIBILITY:</b>	Strong oxidizers or acids

**HAZARDOUS BYPRODUCTS:**

None  
 Will Not Occur

**10. ECOLOGICAL INFORMATION****ENVIRONMENTAL FATE:**

2,4-D has a relatively short half-life (on average 6-9 days in soil, 6-7 in grass) and is readily degraded into nontoxicological substances by soil microbes and aquatic microorganisms. 2,4-D is soluble in water and, therefore, does not bioaccumulate in mammals or in other organisms.

**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**

**DOT REGULATED CONTAINER SIZE:** 30 Gal, 55 Gal, 220 Gal, 260 Gal, Tank Truck  
 (All smaller container sizes are not DOT regulated)  
 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.

**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

**REPORTABLE QUANTITY (RQ):**

100 lbs of 2,4-D acid equivalent or approximately 36 gallons of Turflon II. For releases greater than the RQ, contact the National Response Center at (800) 424-8802.

<b>HMIS INFORMATION</b>	
<b>HEALTH:</b>	<b>3</b>
	<b>1</b>
<b>REACTIVITY:</b>	<b>1</b>
<b>PROTECTIVE:</b>	<b>J</b>

<b>NFPA INFORMATION</b>	
<b>TOXICITY:</b>	<b>3</b>
<b>FIRE:</b>	<b>1</b>
<b>REACTIVITY:</b>	<b>1</b>
<b>SPECIAL:</b>	<b>N</b>

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