

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** **TAHOE® 3A Herbicide**  
**EPA Reg. No.:** 228-520  
**Synonyms:** Triclopyr Triethylamine Salt; (3,5,6-Trichloro-2-Pyridinyl) oxycetic acid, triethylamine salt; Triclopyr TEA  
**Product Type:** Herbicide  
**Company Name:** Nufarm Americas Inc.  
 150 Harvester Drive, Suite 200  
 Burr Ridge, IL 60527  
**Telephone Numbers:** For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,  
 Call CHEMTREC Day or Night: 1-800-424-9300  
 For Medical Emergencies Only, Call 1-877-325-1840  
**Date of Issue:** December 15, 2009 **Supersedes:** December 4, 2007  
**Sections Revised:** 1, 2, 9, 11 and 14

**2. HAZARDS IDENTIFICATION**

**Emergency Overview:**  
**Appearance and Odor:** Clear light brown colored liquid.  
**Warning Statements:** Danger. Keep out of reach of children. Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin or swallowed. Do not get in eyes or on skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.  
**Potential Health Effects:**  
**Likely Routes of Exposure:** Inhalation, eye and skin contact.  
**Eye Contact:** Causes irreversible eye damage. Vapors and mist can cause irritation.  
**Skin Contact:** Slightly toxic and moderately irritating based on toxicity studies. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.  
**Ingestion:** Moderately toxic based on toxicity studies.  
**Inhalation:** Low inhalation toxicity.  
**Medical Conditions Aggravated by Exposure:** Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

**Potential Environmental Effects:**  
 Treatment of aquatic weeds can result in oxygen depletion due to decomposition of dead plants. Oxygen loss, if severe, can cause fish suffocation.

See Section 12: ECOLOGICAL INFORMATION for more information.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

COMPONENT	CAS NO.	% BY WEIGHT
Triclopyr, triethylamine salt	57213-69-1	44.4
Other Ingredients		55.6



**4. FIRST AID MEASURES**

**If in Eyes:** Hold eye 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 on Skin:** 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 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by 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.

**5. FIRE FIGHTING MEASURES**

**Flash Point:** >210°F (>99°C) Pinsky-Martens

**Autoignition Temperature:** Not determined

**Flammability Limits:** Not determined

**Extinguishing Media:** Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

**Unusual Fire and Explosion Hazards:** If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

**Hazardous Decomposition Materials (Under Fire Conditions):** May produce gases such as hydrogen chloride, nitrogen oxides and phosgene.

**National Fire Protection Association (NFPA) Hazard Rating:**

**Rating for this product:** Health: 3    Flammability: 1    Reactivity: 0

Hazards Scale: 0 = Minimal    1 = Slight    2 = Moderate    3 = Serious    4 = Severe

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

**Methods for Containment:** Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

**Methods for Cleanup and Disposal:** Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

**Other Information:** Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

**7. HANDLING AND STORAGE**

**Handling:**

Do not get in eyes or on skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Users should 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 Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Storage:**

Store above 28°F or agitate before use. Do not contaminate water, food or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Controls:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

**Personal Protective Equipment:**

**Eye/Face Protection:** To avoid contact with eyes, wear face shield, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

**Skin Protection:** To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

**Respiratory Protection:** Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

**General Hygiene Considerations:** Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

**Exposure Guidelines:**

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Triclopyr TEA	NE	NE	NE	NE	

NE = Not Established

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance and Odor:** Clear light brown colored liquid.

**Boiling Point:** Not determined

**Density:** 9.5 pounds/gallon

**Evaporation Rate:** Not determined

**Freezing Point:** Not determined

**pH:** 8 – 9

**Solubility in Water:** Soluble

**Specific Gravity:** 1.144 @ 20°C

**Vapor Density:** Not determined

**Vapor Pressure:** Not determined

**Viscosity:** 10.735 cst @ 20°C

**Note:** Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

**10. STABILITY AND REACTIVITY**

**Chemical Stability:** This material is stable under normal handling and storage conditions.

**Conditions to Avoid:** Excessive heat. Do not store near heat or flame.

**Incompatible Materials:** Strong oxidizing agents: bases and acids.

**Hazardous Decomposition Products:** Under fire conditions may produce gases such as hydrogen chloride, nitrogen oxides and phosgene.

**Hazardous Reactions:** Hazardous polymerization will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Toxicological Data:**

Data from laboratory studies on this product are summarized below:

**Oral:** Rat LD<sub>50</sub>: 1,036 mg/kg (female) (estimated based on mortalities for doses tested)

**Dermal:** Rat LD<sub>50</sub>: >5,000 mg/kg

**Inhalation:** Rat 4-hr LC<sub>50</sub>: >2.04 mg/L

**Eye Irritation:** Rabbit: Severely irritating/corrosive

**Skin Irritation:** Rabbit: Moderately irritating

**Skin Sensitization:** Guinea Pigs: Sensitizing

**Subchronic (Target Organ) Effects:** Excessive exposure to Triclopyr may affect heart, kidneys and liver.

**Carcinogenicity / Chronic Health Effects:** Triclopyr did not cause cancer in laboratory studies.

**Reproductive Toxicity:** For triclopyr in laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

**Developmental Toxicity:** Triclopyr did not cause birth defects in laboratory animals.

**Genotoxicity:** For triclopyr, *in-vitro* and animal mutagenicity studies were negative.

**Assessment Carcinogenicity:** None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

**12. ECOLOGICAL INFORMATION**

**Aquatic Toxicity:**

Aquatic toxicity data for the salt and acid forms are presented. The acid data should be considered in an overview of aquatic toxicity because the salt rapidly dissociates to the acid in water. However, triclopyr acid can also reform salts with naturally occurring counter-ions such as calcium and magnesium:

Test/Species	Data on Triclopyr TEA	Data on Triclopyr Acid
96-hour LC <sub>50</sub> Bluegill	893 ppm	148 ppm
96-hour LC <sub>50</sub> Trout	613 ppm	117 ppm
48-hour EC <sub>50</sub> Daphnia	1,496 ppm	132.9 ppm

**Avian Toxicity:**

Triclopyr TEA has been shown to be practically non-toxic to avian species following subacute dietary exposure.

Bobwhite Quail 8-day Dietary LC<sub>50</sub>: >10,000 ppm      Mallard Duck Oral LD<sub>50</sub>: 2,055 mg/kg  
 Mallard Duck 8-day Dietary LC<sub>50</sub>: >10,000 ppm

**Environmental Fate:**

In laboratory and field studies, Triclopyr TEA rapidly dissociates to parent acid in the environment. Triclopyr is moderately persistent and mobile. In soil, the predominant degradation pathway is microbial and the average half-life is 30 days. Half-lives tend to be shorter in warm, moist soils with a high organic content. The predominant degradation pathway for triclopyr in water is photodegradation and the average half-life is one day.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Handling and Disposal:**

**Plastic Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities by burning. If burned stay out of smoke.

**Metal Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**14. TRANSPORTATION INFORMATION**

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

**DOT**

Non Regulated

**IMDG**

Non Regulated

**IATA**

Non Regulated

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations:**

**TSCA Inventory:** This product is exempted from TSCA because it is solely for FIFRA regulated use.

**SARA Hazard Notification/Reporting:**

**Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):**

Immediate and Delayed

**Section 313 Toxic Chemical(s):**

Triclopyr, Trimethylammonium Salt (CAS No. 57213-69-1), 44.4% by weight in product

**Reportable Quantity (RQ) under U.S. CERCLA:**

None

**RCRA Waste Code:**

None

**State Information:**

Other state regulations may apply. Check individual state requirements.

**California Proposition 65:** Not Listed

**16. OTHER INFORMATION**

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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