

MATERIAL SAFETY DATA SHEET

CHASER® TURF HERBICIDE

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

VERDICON
P.O. Box 1286 • Greeley, CO 80632-1286

24-Hour Emergency Phone: 1-800-424-9300
Medical Emergencies: 1-800-301-7976
U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: CHASER TURF HERBICIDE
CHEMICAL NAME: 2,4-Dichlorophenoxyacetic acid, butoxyethyl ester and Triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, butoxyethyl ester
CHEMICAL FAMILY: Phenoxy Herbicide
EPA REG. NO.: 62719-67-65783
MSDS Number: 6271967-04b-VER **MSDS Revisions:** See section 16 **Date Of Issue:** 07/13/04 **Supersedes:** 02/24/04

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN - CAUTION – PRECAUCION - Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle (If you do not understand the label, find someone to explain it to you in detail.) Harmful if swallowed. Prolonged or repeated skin contact may cause allergic reactions in some individuals.

This product is a reddish brown-colored liquid with sweet odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
2,4-D, butoxyethyl ester*	34.40	1929-73-3	10 mg/m ³
Triclopyr, butoxyethyl ester**	16.50	64700-56-7	none established
Inert Ingredients, including Kerosene	49.10	8008-20-6	200 mg/m ³ (Skin)

4. FIRST AID MEASURES

If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976. Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): 148°F/64.4°C (Seta flash)
FLAMMABLE LIMITS (LFL & UFL): Not established
EXTINGUISHING MEDIA: Considered combustible, use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.
HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to oxides of carbon, hydrogen chloride, phosgene and oxides of nitrogen.
SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Avoid breathing vapors. Absorb and sweep up spills immediately and transfer to suitable containers for possible land application according to label use or for disposal. Check local, state and federal regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, and 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 PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. See section 8 for PPE. Keep away from children.

STORAGE: Store above 10°F/-12.2°C. Do not use or store near heat or open flame. Do not contaminate water, food, or feed by storage or disposal.

Personal Protective Equipment: Applicators and other handlers must wear: long sleeved shirt and long pants, chemical resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton®, shoes plus socks, and protective eyewear. **For containers over 1 gallon, but less than 5 gallons:** Mixers and loaders who do not use a mechanical system (such as probe and pump) to transfer contents of the container must wear coveralls or a chemical-resistant apron in addition to other required PPE. Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: For containers of 5 gallons or more: A mechanical system (such as probe and pump) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

RESPIRATORY PROTECTION: Not normally required, if vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved pesticide respirator.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
2,4-D Acid	10 mg/m ³	10 mg/m ³
Kerosene	not listed	200 mg/m ³ (Skin) (P) ^x

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Reddish brown-colored liquid with sweet odor **SOLUBILITY:** Soluble

SPECIFIC GRAVITY (Water = 1): 1.013 g/ml

BULK DENSITY: 8.45 lbs/gal

pH: Not established

VAPOR PRESSURE: 0.1 mm @ 37.8°C (Kerosene)

BOILING POINT: > 347°F/175°C (Kerosene)

PERCENT VOLATILE (by volume): Not established

EVAPORATION RATE: Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample.

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Avoid temperatures above or near flashpoint.

INCOMPATIBILITY: Acids, alkalis (bases) and oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: If burned, noxious fumes, nitrogen oxide, hydrogen chloride and phosgene may be formed under fire conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): >2300 mg/kg

Acute Dermal LD₅₀ (rabbit): >2000 mg/kg

Eye Irritation (rabbit): May cause moderate irritation

Skin Irritation (rabbit): May cause slight irritation

Acute Inhalation LC₅₀ (rat): >5 mg/L.

Skin Sensitization (guinea pig): Not established

Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH

12. ECOLOGICAL INFORMATION

This product is toxic to fish. Drift or runoff may adversely affect fish and non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers. **Plastic Containers:** Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill, 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 puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: LESS THAN 50 GALLONS: NOT REGULATED BY USDOT FOR SURFACE TRANSPORTATION.

50 GALLONS AND GREATER: RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D), 9, UN3082, III, MARINE POLLUTANT/REG GUIDE 171

U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2:CLASS: 60)

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	2 Health	0 Least	2 Health
	2 Flammability	1 Slight	2 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	H PPE
		4 Severe	

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CHASER® TURF HERBICIDE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire Y Sudden Release of Pressure N
Delayed Y Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: 2,4-D butoxyethyl ester (CAS: 1929-73-3) 100 lbs

SARA, Title III, Section 313: 2,4-D butoxyethyl ester (CAS: 1929-73-3) 34.4%

RCRA Waste Code: Not listed

CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: Format modified to address changes in ANSI Standard Z400.1-2004

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

@Chaser is a registered trademark

@Viton is a registered trademark of DUPONT DOW ELASTOMERS L.L.C.

*2,4-D Acid equivalent: 23.7%; 2 lb/gal.

**Triclopyr acid equivalent: 11.9%; 1 lb/gal.

^X(P): Avoid prolonged and repeated skin contact which can lead to diesel fuels dermal irritation and may be associated with an increased risk of skin cancer.

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