

# MATERIAL SAFETY DATA SHEET

# TREFLAN\* 5G 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:

United Horticultural Supply  
P.O. Box 667 • Greeley, CO 80632-0667

24-Hour Emergency Phone: 1-800-424-9300  
Medical Emergencies: 1-800-301-7976

**PRODUCT NAME:** TREFLAN\* 5G HERBICIDE  
**CHEMICAL NAME:** Trifluralin: a, a, a-trifluoro-2, 6-dinitro-N, N-dipropyl-p-toluidine  
**CHEMICAL FAMILY:** Trifluorodinitrotoluidine Herbicide  
**EPA REG. NO.:** 62719-98-65783

\*Treflan is a trademark of Dow AgroSciences, LLC – U.S. Patent 4,226,789

**MSDS Number:** 6271998-03 **MSDS Revisions:** All sections reviewed; new ANSI format **Date Of Issue:** 07/02/03 **Supersedes:** 01/07/97

## 2. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Trifluralin	5.00	1582-09-8	none established
Kerosene	2.80	8008-20-6	200 mg/m <sup>3</sup>
Inert Ingredients	92.20		

## 3. HAZARDS IDENTIFICATION SUMMARY

**CAUTION: KEEP OUT OF REACH OF CHILDREN – Causes moderate eye irritation. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.**

This product is a bright yellow free-flowing granule with aromatic odor. Primary routes of entry are Inhalation, eye contact and skin contact.

## 4. FIRST AID MEASURES

**If in eyes:** 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.

**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:** Remove all contaminated clothing. Rinse skin immediately with plenty of water for 15-20 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. Have the product label or container with you when calling a poison control center or doctor if going for treatment.

**NOTE TO PHYSICIAN:** TREFLAN 5G contains a small amount of kerosene. In this product form the kerosene present would not be expected to produce toxicity that may occur with ingestion of petroleum distillates.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.**

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** Not applicable; does not flash

**FLAMMABLE LIMITS (LEL & UEL):** Not applicable

**EXTINGUISHING MEDIA:** 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 or formation of hazardous chlorine-containing compounds.

**SPECIAL FIRE FIGHTING PROCEDURES:** Considered non-flammable. May emit toxic fumes when heated to decomposition. Wear self-contained breathing apparatus and full protective gear.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Do not allow water runoff to enter nearby streams, ponds or lakes. Keep containers cool with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

In case of leak or spill, contain material and dispose as waste. Do not contaminate any body of water. Sweep up material. Place it and damaged unusable containers in a landfill approved for pesticides. Check local, state and federal regulations for proper disposal.

**CAUTION:** Prevent spilled material from flowing onto adjacent land, or into municipal sewers and open bodies of water.

## 7. HANDLING AND STORAGE

**HANDLING:** Keep away from children, feed and food products, and seed. Causes eye irritation. Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

**STORAGE:** Store in original container only. Keep tightly closed. Keep out of reach of children. Do not contaminate water supplies by handling and storage of product. Drift or runoff may adversely affect aquatic invertebrates and non-target plants.

**EPA HANDLER REQUIREMENTS**

**Worker Protection Standard – 40 CFR 170**

**Personal Protective Equipment: Applicators and other handlers must wear:** long sleeved shirt and long pants, chemical resistant gloves such as butyl rubber >11 mils; or natural rubber >14 mils; or neoprene rubber >14 mils; or nitrile rubber >14 mils and shoes plus socks. Follow manufacturer's instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Not normally required. Use local exhaust if working in confined areas.  
**RESPIRATORY PROTECTION:** Not normally required, if dusts exceed acceptable levels, wear a NIOSH approved pesticide respirator for dust.  
**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.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
Kerosene	None established	200 mg/m <sup>3</sup> (as total hydrocarbon vapor)

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Bright yellow free-flowing granule with aromatic odor  
**SPECIFIC GRAVITY (Water= 1):** Not available  
**VAPOR PRESSURE:** Not established  
**PERCENT VOLATILE (by volume):** Not applicable  
**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.

**SOLUBILITY:** Insoluble  
**pH:** 7.7 (aqueous 50/50)

**BULK DENSITY:** Not available  
**BOILING POINT:** Not applicable  
**EVAPORATION RATE:** Not applicable

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable  
**INCOMPATIBILITY:** None known.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Will emit toxic fumes as it burns.  
**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** None known.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (rat):** 500 mg/kg  
**Eye Irritation (rabbit):** Causes moderate eye irritation  
**Inhalation LC<sub>50</sub>:** May cause respiratory tract irritation.  
**Carcinogenic Potential:** None listed in OSHA, NTP, IARC or ACGIH

**Acute Dermal LD<sub>50</sub> (rabbit):** 2000 mg/kg  
**Skin Irritation (rabbit):** May cause irritation  
**Ingestion:** May cause stomach distress, nausea or vomiting.

**12. ECOLOGICAL INFORMATION**

This pesticide is extremely toxic to freshwater marine and estuarine fish and aquatic invertebrates including shrimp and oyster. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply in a manner which will directly expose canals, lakes streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment wash water. Do not apply when weather conditions favor drift from target area.

**13. DISPOSAL CONSIDERATIONS**

Completely empty bag into application equipment. Then dispose of in a sanitary landfill or by incineration or by other procedures approved by local, state and federal regulations. If burned stay out of smoke.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** NOT REGULATED USDOT.  
**U.S. Surface Freight Classification:** COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS 60)  
**Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.**

**15. REGULATORY INFORMATION**

<b>NFPA &amp; HMIS Hazard Ratings:</b>		<b>NFPA</b>		<b>HMIS</b>	
2	Health	0	Least	2	Health
0	Flammability	1	Slight	0	Flammability
0	Instability	2	Moderate	0	Reactivity
		3	High	H	PPE
		4	Severe		

# MATERIAL SAFETY DATA SHEET

# TREFLAN\* 5G HERBICIDE

## SARA Hazard Notification/Reporting

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

Reportable Quantity (RQ) under U.S. CERCLA: Trifluralin (CAS: 1582-09-8) 10 lbs.

SARA, Title III, Section 313: Trifluralin (CAS: 1582-09-8) 5%; TRI Threshold 100 lbs.

RCRA Waste Code: Not listed

CA Proposition 65: Not listed

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## 16. OTHER

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MSDS STATUS: All sections reviewed; new ANSI format

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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