

# MATERIAL SAFETY DATA SHEET

TURFLON\* Ester

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Issue Date: 08/11

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Chemical Product

TURFLON\* Ester

EPA Reg. No. 17545-8-54705

Common Name: Triclopyr.

TSCA/CAS No.: This product is a mixture — there is no specific CAS number.

### Manufactured For

Lawn and Garden Products, Inc.

P. O. Box 35000

Fresno, CA 93745-5000

### Emergency Phone Numbers

Emergency Telephone: DAYS: (559) 499-2100 EVES.: (559) 994-9144

CHEMTREC (24-Hour Emergency Number): (800) 424-9300

EPA National Response Center: (800) 424-8802

## SECTION 2. COMPOSITION INFORMATION

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ (lbs)
Triclopyr [3,5,6-trichloro-2-pyridinyl]oxy-acetic acid, butoxy ethyl ester	64700-56-7	61.6%	N.A.*	N.P.*
Ethylene glycol monobutyl ether	111-76-2	0.5%	N.A.	N.P.
Balance		39.0%		

\* N.A. - Not Available. \* N.P. - Not Pertinent.

## SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Colorless to yellow liquid with mild odor. Causes eye and skin irritation. Harmful if swallowed. May cause allergic skin reaction. Avoid contact with strong acids, bases and oxidizers. Nitrogen oxides, hydrogen chloride, and phosgene may result under fire conditions. Not D.O.T. regulated.

HEALTH: 2

REACTIVITY: 0

FLAMMABILITY: 1

ENVIRONMENT: 0

(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

## SECTION 4. FIRST AID

**Eyes:** Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice.

**Skin:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**Ingestion:** 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. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth-to-mouth use rescuer protection (pocket mask etc.). Call a poison control center or doctor for treatment advice.

**NOTES TO PHYSICIAN:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5.	FIRE AND EXPLOSION HAZARDS
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Flash Point:	>212°F (100°C)
Test Method:	Pensky-Martens Closed Cup ASTM D 93
Flammable Limits:	Not determined.
UEL Flammable Limits:	Not determined.
Autoignition Temperature:	> 617°F (>325°C) (Literature)
Flammability Classification:	Not available.
Known Hazardous Products of Combustion:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides, hydrogen chloride, carbon monoxide, carbon dioxide, phosgene.
Properties that Initiate/Contribute to Intensity of Fire:	Not known.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential For Release of Flammable Vapors:	None.
Unusual Fire & Explosion Hazards:	Container may rupture from gas generation I a fire situation Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.
Extinguishing Media:	Water fog or fine spray, foam, CO <sub>2</sub> , and dry chemical. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and goggles. Avoid smoke inhalation. Contain any liquid runoff.

SECTION 6.	SPILLS AND LEAKS
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Containment:	Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Collect liquid or absorb onto absorbent material and package for disposal.
Evacuation:	Not necessary.

SECTION 7.	STORAGE AND HANDLING
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Storage:	Store in plastic or stainless steel container in a cool, well-ventilated, dry place at temperatures above 40°F. Do not store near food or feeds. Do not stack pallets more than two (2) high.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing.

SECTION 8.	PERSONAL PROTECTIVE EQUIPMENT
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Eyes:	Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling.
Skin:	Impervious gloves and clothes.
Respiratory:	Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved dust/mist respirator (such as 3M #8710).
Ventilation:	Recommended but no TLV established.

SECTION 9.	PHYSICAL AND CHEMICAL DATA
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Appearance:	Colorless to yellow liquid.
Odor:	Mild.
pH:	3.36 (@1%) <i>pH Electrode (1% aqueous suspension)</i>
Vapor Pressure:	No test data available.
Vapor Density (Air=1):	No test data available.
Boiling Point:	No test data available.
Freezing Point:	No test data available.
Water Solubility:	Emulsifies.
Density:	9.26 lbs./gal.
Evaporation Rate:	No test data available.
Viscosity:	No test data available.
% Volatile:	No test data available.
Octanol/Water Partition Coefficient:	No test data available.
Saturated Vapor Concentration:	No test data available.

SECTION 10.	STABILITY AND REACTIVITY
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Stability:	Stable.
Conditions To Avoid:	Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.
Incompatibility:	Strong acids, bases and oxidizers.
Hazardous Decomposition Products:	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen oxides, phosgene.
Hazardous Polymerization:	Will not occur.

SECTION 11.	POTENTIAL HEALTH EFFECTS
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<u>Acute Effects:</u>	
Eyes:	May cause slight eye irritation. Corneal injury is unlikely.
Skin:	May cause moderate skin irritation with local redness. May cause drying and flaking of the skin. LD <sub>50</sub> (Rabbits) > 5,000 mg/kg.
Ingestion:	Low toxicity if swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. LD <sub>50</sub> Rat female = 3200 mg/kg.
Inhalation:	Prolonged exposure is not expected to cause adverse effects. LC <sub>50</sub> , 4H, Aerosol, Rat, male and female: >5.05 mg/l.
<u>Subchronic Effects:</u>	None known.
<u>Chronic Effects:</u>	None known.

**SECTION 12. ECOLOGICAL INFORMATION**

Algal/Lemna Growth Inhibition:	Based largely or completely on information for similar material(s). EC50 green alga <i>Pseudokirchneriella subcapitata</i> (formerly known as <i>Selenastrum capricornutum</i> ), biomass growth inhibition: 11 mg/l.
Toxicity to Fish and Invertebrates:	Material is highly toxic to aquatic organisms on an acute basis (LC <sub>50</sub> /EC <sub>50</sub> between 0.1 and 1 mg/L in the most sensitive species tested.
Toxicity to Plants:	See Algal/Lemna Growth Inhibition above.
Toxicity in Birds:	Based largely or completely on information for similar materials(s). Oral LD <sub>50</sub> , bobwhite ( <i>Colinus virginianus</i> ): 1,350 mg/kg.

**SECTION 13. DISPOSAL**

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents in accordance with state and local waste disposal regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal.

**SECTION 14. TRANSPORTATION**

D.O.T. Non-Bulk:	Not D.O.T. Regulated.
Other Shipping Description:	Compounds, Tree or Weed Killing (Herbicide), Liquid. NMFC Item 50320, LTL Class 60

**SECTION 15. REGULATORY INFORMATION**

CERCLA: None.

SARA TITLE III, Section 313 Toxic Chemicals: None.

PROPOSITION 65 (CA): None.

PENNSYLVANIA STATE RIGHT-TO-KNOW: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

**SECTION 16. OTHER**

All information appearing in this document was based on data provided by third party sources and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act. The information is believed to be accurate as of the preparation date, but is not warranted as being the final authority in the use of this product. This information does not purport to be legal or medical advice.

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