

MATERIAL SAFETY DATA SHEET

TURFLON* Ester

Page 1 of 4

Issue Date: 09/04

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) 435-2163

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

EPA National Response Center: (800) 424-8802

SECTION 2. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ (lbs)
Triclopyr [3,5,6-trichloro-2-pyridinyl-oxy-acetic acid, butoxy ethyl ester]	064700-56-7	61.6%	N.A.*	N.P.*
Other Ingredients, total including:		38.4%	N.A.	N.A.
Kerosene	008008-20-6			
Proprietary Surfactants				

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

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Amber liquid with combustible properties with kerosene-like odor. May cause eye and skin irritation. Avoid contact with acid, base and oxidizing material. Nitrogen oxides, hydrogen chloride, and phosgene may result under fire conditions. Not D.O.T. regulated.

HEALTH: 2 REACTIVITY: 1 FLAMMABILITY: 2 ENVIRONMENT: 1
(0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme)

SECTION 4. FIRST AID

Eyes: Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several minutes. If affects occur, consult a physician, preferably an ophthalmologist.

Skin: Wash with plenty of water.

Ingestion: Call a poison control center or doctor immediately and/or transport to emergency facility immediately. Do not induce vomiting.

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

SECTION 4.	FIRST AID (Continued)
------------	-----------------------

NOTE TO PHYSICIAN: The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5.	FIRE AND EXPLOSION HAZARDS
------------	----------------------------

Flash Point:	> 147°F.
Test Method:	TCC
LEL Flammable Limits:	Not determined.
UEL Flammable Limits:	Not determined.
Autoignition Temperature:	Not determined.
Flammability Classification:	Combustible.
Known Hazardous Products of Combustion:	Not known.
Properties that Initiate/Contribute to Intensity of Fire:	None.
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:	Toxic, irritating vapors may be produced if produce is involved in fire.
Extinguishing Media:	Water fog, foam, CO ₂ , and dry chemical.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and goggles. Avoid smoke inhalation. Contain any liquid runoff.

SECTION 6.	SPILLS AND LEAKS
------------	------------------

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
------------	----------------------

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:	Harmful if swallowed, absorbed through skin, or inhaled. Avoid contact with eyes, on skin or on clothing. Avoid breathing spray mists or vapors. Wear long-sleeved shirt and pants, waterproof gloves and shoes plus socks. Wash with soap and water after handling. Remove contaminated clothing and wash clothing before reuse. Do not contaminate feed and foodstuffs. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

SECTION 8. PERSONAL PROTECTIVE EQUIPMENT

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

Appearance:	Amber liquid.
Odor:	Kerosene-like.
pH:	Not available.
Vapor Pressure:	0.1 mm @ 37.8°C (Kerosene)
Vapor Density (Air = 1):	> 1
Boiling Point:	> 302°F
Freezing Point:	Not available.
Water Solubility:	Emulsifies
Density:	9.01 lbs./gal.
Evaporation Rate:	Not available.
Viscosity:	Not available.
% Volatile:	Not available.
Octanol/Water Partition Coefficient:	Not available.
Saturated Vapor Concentration:	Not available.

SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable.
Conditions To Avoid:	Combustible. Avoid sources of ignition if temperature is near or above flash point.
Incompatibility:	Acid, base and oxidizing material.
Hazardous Decomposition Products:	Nitrogen oxides, hydrogen chloride, and phosgene may result under fire conditions.
Hazardous Polymerization:	Will not occur.

SECTION 11. POTENTIAL HEALTH EFFECTSAcute Effects:

Eyes:	May cause slight temporary eye irritation.
Skin:	Prolonged or repeated exposure may cause skin irritation. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. With the dilute mix, no allergic skin reaction is expected. Prolonged skin contact is unlikely to result in absorption of harmful amounts. LD ₅₀ (Rabbits) > 2000 mg/kg. LD ₅₀ (Rats) > 5000 mg/kg.
Ingestion:	Low toxicity of swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

LD₅₀ Male rats = 1581 mg/kg; Female rats = 1338 mg/kg.

SECTION 11.	POTENTIAL HEALTH EFFECTS
-------------	--------------------------

Inhalation: Excessive exposure may cause irritation to upper respiratory tract. Signs and symptoms of excessive exposure may be central nervous system effects (due to kerosene).

Subchronic Effects: None known.

Chronic Effects: None known.

SECTION 12.	ECOLOGICAL INFORMATION
-------------	------------------------

Algal/Lemna Growth Inhibition: Not known.

Toxicity to Fish and Invertebrates: Toxic to fish.

Toxicity to Plants: Not known.

Toxicity in Birds: Not known.

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.: 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.

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned.

<u>Chemical Name</u>	<u>CAS Number</u>	<u>List</u>
Proprietary Ingredient	Proprietary	PA1, NJ3
Kerosene	008008-20-6	PA1, NJ3

PA1 = Pennsylvania Hazardous Substance (present at \geq 1.0%)

NJ3 = New Jersey Workplace Hazardous Substance (present \geq 1.0%)

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.

Turflon is a trademark of Dow AgroSciences LLC