

# MATERIAL SAFETY DATA SHEET

VEGETABLE AND ORNAMENTAL WEEDER Page 1 of 5

Issue Date: 06/11

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Chemical Product

VEGETABLE AND ORNAMENTAL WEEDER

EPA Reg. No. 54705-6

Common Name: Liquid herbicide.

Chemical Description: Trifluralin.

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. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ (lbs)
Trifluralin	1582-09-8	43.0	N.A.*	10
Naphthalene	91-20-3	7.0	50 mg/m <sup>3</sup> 10 ppm	100
Balance		50.0		

\* N.A. - Not available.

## SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Orange liquid with solvent odor. May cause eye irritation. May cause skin irritation. May cause allergic skin reaction. Harmful if swallowed. Avoid contact with strong oxidizers. Contain any liquid runoff. D.O.T. regulated in 12/1 quart and 4/1 gallon cases.

HEALTH: 2 REACTIVITY: 1 FLAMMABILITY: 1 ENVIRONMENT: 1  
(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 first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before reuse. Shoes or other leather items which cannot be decontaminated should be disposed of properly.

Ingestion: 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.

Notes to Physician: Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury. The decision of whether to induce vomiting or not

SECTION 4.	FIRST AID (Continued)
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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. Have the Material 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.

Inhalation: Move 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. If breathing is difficult, oxygen should be administered by qualified personnel.

Medical Conditions Aggravated by Exposure: Skin contact may aggravate preexisting dermatitis.

SECTION 5.	FIRE AND EXPLOSION HAZARDS
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Flash Point:	210°F (99°C).
Test Method:	PMCC ASTM D 93
LFL Flammable Limits:	1.8% (V). <i>Estimated Solvent.</i>
UFL Flammable Limits:	11.8% (V). <i>Estimated Solvent.</i>
Autoignition Temperature:	Not available.
Flammability Classification:	Nonflammable.
Known Hazardous Products of Combustion:	Nitrogen oxides, carbon monoxide, carbon dioxide, and fluorinated hydrocarbons.
Properties that Initiate/Contribute to Intensity of Fire:	Not available.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	None known.
Potential For Release of Flammable Vapors:	Not known.
Unusual Fire & Explosion Hazards:	Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.
Extinguishing Media:	Water fog or fine spray, CO <sub>2</sub> , foam, or dry chemicals. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic forms (including AFFF) or protein foams may function, but will be less effective.
Special Firefighting Procedures:	Stay upwind of smoke. Wear full protective clothing, positive pressure, self-contained breathing apparatus and protective firefighting clothing. Contain any liquid runoff.

SECTION 6.	SPILLS AND LEAKS
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Containment: Prevent product spillage from entering into a soil, ditches, sewers, waterways and/or groundwater.

Clean Up: Collect liquid or absorb onto absorbent material (such as clay, dirt, sand), sweep up and collect in suitable and properly labeled containers for disposal according to local, state and federal regulations.

**SECTION 6. SPILLS AND LEAKS (Continued)**

Evacuation: Not necessary but restrict entry.

Reporting: When spills of Trifluralin and naphthalene exceed the RQ it must be reported as a priority pollutant under the CERCLA spill reporting requirements.

**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. Keep container tightly closed when not in use. Do not contaminate water, food or feed. 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. Causes moderate eye irritation. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Avoid contact with eyes, skin, or clothing. Wear long-sleeved shirt, long pants, chemical-resistant gloves, and shoes plus socks when mixing and applying this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep all persons, children, and pets out of treated area until sprays have dried. Avoid contamination of feed or food products.

**SECTION 8. PERSONAL PROTECTIVE EQUIPMENT**

Eyes: Protective eyewear.

Skin: Long sleeved shirt and long pants; chemical-resistant gloves; and shoes plus socks.

Respiratory: Not normally needed. If use generates a 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: Orange liquid.  
Odor: Solvent.  
pH: 5.0 (aqueous 50/50)  
Vapor Pressure: <1 mm Hg at 68°F (solvent)  
Vapor Density (Air=1): 4.7 (solvent)  
Boiling Point: 450 to 527°F (232-275°C).  
Freezing Point: Not available.  
Water Solubility: Emulsifies in water.  
Density: 9.32 lbs./gal.  
Evaporation Rate (butyl acetate = 1): Not available.  
Viscosity: Not available.  
% Volatile: Not available.  
Octanol/Water Partition Coefficient: Not available.  
Saturated Vapor Concentration: Not available.

SECTION 10.	STABILITY AND REACTIVITY
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Stability:	Stable under recommended storage conditions. Unstable at elevated temperatures.
Conditions To Avoid:	Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid static discharge.
Incompatibility:	Avoid contact with strong oxidizers.
Hazardous Decomposition Products:	May include but are not limited to carbon dioxide, carbon monoxide, nitrogen oxides, and fluorinated hydrocarbons.
Hazardous Polymerization:	Not known to occur.

SECTION 11.	POTENTIAL HEALTH EFFECTS
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Acute Effects:

Eyes:	May cause slight irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness.
Skin:	Brief contact may cause slight skin irritation with local redness. May cause drying or flaking of the skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts. May cause drying and flaking of skin. Skin contact may cause allergic skin reaction. LD <sub>50</sub> (Rabbits, male and female) >2000 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. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia. Oral LD <sub>50</sub> (Rat, male) >5000 mg/kg.
Inhalation:	No adverse effects are anticipated from single exposure to vapor. LC <sub>50</sub> for rat (male and female) > 7.74 mg/l.

Systemic (Other Target Organ) Effects:

For Trifluralin, in animals, effects have been reported on the following organs: blood, kidney and liver. For the solvent, in animals, effects have been reported on the following organs: blood, kidney and liver. For the solvent, in animals, effects have been reported on the following organs: lungs, stomach, thyroid gland and urinary tract. Cataracts and other eye effects have been reported in humans repeatedly exposed to naphthalene vapor or dust.

Cancer Information:

A low incidence of urinary tract tumors was seen in only 1 of 5 chronic studies in rats with trifluralin. Trifluralin is not anticipated to be a carcinogenic risk to man. Contains naphthalene which has caused cancer in some laboratory animals.

Teratology (Birth Defects):

Trifluralin did not cause birth defects in animals; other fetal effects occurred only at doses toxic to the mother.

Reproductive Effects:

Trifluralin did not interfere with reproduction in animal studies.

SECTION 12.	ECOLOGICAL INFORMATION
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Algal/Lemna Growth Inhibition:	Not known.
Toxicity to Fish and Invertebrates:	Toxic. LC <sub>50</sub> /EC <sub>50</sub> <0.1 mg/L in most sensitive species.
Toxicity to Plants:	Toxic.
Toxicity in Birds:	Practically non-toxic. LC <sub>50</sub> is >2000 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 according to state and local 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. Do not discharge.

**SECTION 14. TRANSPORTATION**

D.O.T. Proper Shipping Description:

12/1 pint cases:	Not D.O.T. Regulated.
12/1 quarts and 4/1 gallon cases:	Environmentally Hazardous Substance, Liquid, N.O.S. (Trifluralin), 9, UN3082, PG III, RQ 10 Lbs., Ltd. Qty.
Other Shipping Description:	Compounds, Tree or Weed Killing (Herbicide), Liquid. NMFC Item 50320, LTL Class 60

**SECTION 15. REGULATORY INFORMATION**

CERCLA: Trifluralin and naphthalene are listed as priority pollutants under the Clean Water Act and, as such, fall under the CERCLA spill reporting requirements of 40 CFR 302.

SARA TITLE III, Section 313 Toxic Chemicals: Trifluralin (43.0%) and Naphthalene (7.0%).

PROPOSITION 65: ATTENTION: This product contains a chemical known to the State of California to cause cancer.

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>
Trifluralin	1582-09-8	NJ2, NJ3, PA1, PA3
Naphthalene	91-20-3	NJ2, NJ3, PA1, PA3

NJ2=New Jersey Environmental Hazardous Substance (present  $\geq$  1.0%)

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

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

PA3=Pennsylvania Environmental Hazardous Substance (present at  $\geq$  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.