

MATERIAL SAFETY DATA SHEET

WEED IMPEDE™

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Issue Date: 04/03

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product

WEED IMPEDE™

EPA Reg. No. 54705-5

Common Name: Oryzalin: 3,5-Dinitro-N4,N4-dipropyl-sulfanilamide.

Chemical Description:

TSCA/CAS No.: The primary CAS number is 19044-88-3.

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)
Oryzalin: 3,5-Dinitro-N4,N4-dipropyl-sulfanilamide	19044-88-3	40.4	*N.A.	*N.P.
Propylene Glycol	57-55-6	Proprietary	N.A.	N.P.
Glycerin	56-81-4	Proprietary	N.A.	N.P.

\* N.A. - Not Available.

\* N.P. - Not Pertinent.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Opaque bright orange liquid with slight aromatic odor. May cause slight transient eye irritation. Prolonged exposure may cause skin irritation. Water based, will not burn. Product is toxic to fish and aquatic organisms. Not D.O.T. regulated.

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

SECTION 4. FIRST AID

Eyes: Flush eyes with plenty of water. Get medical attention if irritation persists.

Skin: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention if irritation persists.

Ingestion: Call a doctor or get medical attention. Do not induce vomiting unless so directed by medical personnel.

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

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

SECTION 5.	FIRE AND EXPLOSION HAZARDS
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Flash Point:	No ignition up to 200°F.
Test Method:	SCC
LEL Flammable Limits:	Water based product.
UEL Flammable Limits:	Water based product.
Autoignition Temperature:	Water based product.
Flammability Classification:	Noncombustible.
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:	This material will not burn until a sufficient amount of water has evaporated. At this point, the material will exhibit the flammability characteristics of propylene glycol and oryzalin. The explosive potential of oryzalin as an airborne dust is rated as severe. The minimum ignition temperature for a dust cloud is 714°F (379°C).
Extinguishing Media:	This product is a water based suspension and will not burn.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and full protective clothing.

SECTION 6.	SPIILLS 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 original container only 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. Harmful if swallowed, absorbed through skin, or inhaled. Causes eye irritation. May cause skin sensitization reactions in certain individuals. Avoid contact with eyes, on skin or on clothing. Avoid breathing vapor or spray mists. 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.

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**

Appearance:	Bright orange opaque liquid.
Odor:	Slight aromatic odor.
pH:	5.0 to 6.8
Vapor Pressure:	Approximately 23 mm Hg @ 25°C.
Vapor Density (Air = 1):	1.178 relative to air @ 25°C.
Boiling Point:	212°F (100°C).
Freezing Point:	Not available.
Water Solubility:	Miscible in water.
Density:	9.49 to 10.33 lbs./gal
Evaporation Rate:	Not determined.
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:	If the water in the mixture evaporates, the resultant mixture should be handled with care. The explosive potential of oryzalin as an airborne dust is rated as severe. The minimum ignition temperature for a dust cloud is 714°F (379°C).
Incompatibility:	None known.
Hazardous Decomposition Products:	Nitrogen oxides and other toxic gases and fumes may be formed if product is involved in a fire.
Hazardous Polymerization:	Not known to occur.

**SECTION 11. POTENTIAL HEALTH EFFECTS**Acute Effects:

Eyes:	May cause slight temporary eye irritation. Corneal injury is unlikely.
Skin:	Prolonged exposure may cause skin irritation. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. LD <sub>50</sub> (Rabbits) > 5000 mg/kg.
Ingestion:	Single dose oral toxicity is low. The oral LD <sub>50</sub> for rats is 5000 mg/kg.
Inhalation:	At room temperature, exposure to vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause irritation and other effects. The LC <sub>50</sub> for rats was > 6.30 mg/L in 4 hours.

Systemic (Other Target Organ) Effects: Propylene glycol, in animals, has been shown to cause liver, kidney, bladder, spleen or blood effects. Human signs and symptoms may include central nervous depression (headache, dizziness, drowsiness and incoordination).

Teratology: Orazylin did not cause birth defects, or other fetal effects occurred only at doses toxic to the mother.

Reproductive Effects: Most components of this product did not interfere with reproduction. Reproductive effects seen in female animals are believed to be due to altered nutritional states resulting from extremely high doses of glycerin given in the diet. Similar effects may have been seen in animals fed synthetic diets.

**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: Oryzalin (40.4%).  
PROPOSITION 65 (CA): None.

**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.