

MATERIAL SAFETY DATA SHEET

Phoenix Environmental Care, LLC
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General Information No. 229-245-8845
In Case of Emergency, Call
PROSAR: 888-875-1724
CHEMTREC: 800-424-9300

I. PRODUCT IDENTIFICATION

Product Name: Starfighter L
Active Ingredient: Oxadiazon (34.1%)
Chemical Name: [2-tert-butyl-4-(2,4-dichloro-5-iodopropoxy)phenyl]- Δ^2 -1,3,4-oxadiazolin-5-one]

II. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS number	% by Wt.	OSHA PEL	ACGIH TLV	NTP/IARC/OSHA Carcinogen
Oxadiazon	19666-30-9	34.1	Not available	Not available	No

III. HAZARDS IDENTIFICATION

NOTE: Please refer to Section XI for detailed toxicological information.

Symptoms of Acute Exposure: Moderate eye irritation. Avoid contact with eyes. May cause slight irritation. Harmful if absorbed through skin. Avoid contact with skin and clothing. Harmful if swallowed. Do not take internally. May cause irritation of the mucous membranes. Avoid breathing spray mist.

Long-Term Exposure This product or its components may have target organ effects.

NFPA 704 (National Protection Association)
Health 2
Flammability 1
Instability 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

IV. 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 on Skin or Clothing:	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.
If Inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
If Swallowed:	Call a poison control center or doctor for treatment advice. Have affected person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor.
Note to Physician:	Local Signs and Symptoms: The product causes irritation of eyes, skin and mucous membranes. Systemic Signs and Symptoms: To date no symptoms are known. Treatment: There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

V. FIRE FIGHTING MEASURES

Flash point:	> 96.7 °C / 206.1 °F
Fire and Explosion Hazards:	Dangerous gases are evolved in the event of a fire.
Suitable Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing Media:	High volume water jet.
Fire Fighting Instructions:	Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth. In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

VI. ACCIDENTAL RELEASE MEASURES

In case of spill or leak:	Keep people away from and upwind of spill/leak. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Keep in suitable, closed containers for disposal. Clean floors and contaminated objects with plenty of water.
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Information regarding safe handling see Section VII. Information regarding personal protective equipment see Section VIII. Information regarding waste disposal, See section XIII. Check also for any local site procedures.

VII. HANDLING AND STORAGE

Handling:	No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Use only in area provided with appropriate exhaust ventilation. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.
Storage:	Store in a place accessible by authorized persons only. Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from freezing.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Contact:	Tightly fitting safety goggles.
Skin Contact:	Chemical resistant nitrile rubber gloves. Wear long-sleeved shirt and long pants and shoes plus socks.
Inhalation:	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.
Exposure Limits:	1, 2-Propanediol 57-55-6 WEEL TWA 10 mg/m ³ Form of exposure Aerosol.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Beige, viscous liquid
Odor:	Faint, glue-like smell
Specific Gravity/ Density:	1.124 g/mL @ 77.36° F (25.2° C)
pH:	4.37
Vapor pressure:	<10 ⁻⁸ mmHg @ 77° F (25° C)

X. STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage conditions.
Incompatibility:	Strong oxidizing agents.
Conditions to Avoid:	Extremes of temperature and direct sunlight.
Hazardous Decomposition Products:	No hazardous reactions when stored and handled according to prescribed instructions.

XI. TOXICOLOGICAL INFORMATION

Only acute toxicity studies have been performed on the formulated product. The non-acute information pertains to the technical-grade active ingredient, oxadiazon.

Acute Oral Toxicity (female rat LD₅₀): > 2,000 mg/kg

Acute Dermal Toxicity (rat LD₅₀): > 2,000 mg/kg

Acute Inhalation Toxicity (rat: LC₅₀):

> 2.31 mg/L

Exposure time: 4 h

Determined in the form of liquid aerosol; highest concentration tested;

No deaths.

(rat: LC₅₀): > 9.24 mg/L

Exposure time: 1 h

Determined in the form of liquid aerosol; extrapolated from the 4 hr LC₅₀.

Skin Irritation (rabbit):

Slight irritation.

Eye Irritation (rabbit):

Mild eye irritation.

Sensitization (guinea pig):

Non-sensitizing.

Chronic Toxicity:

Oxadiazon caused liver effects in chronic studies in rats, mice and dogs.

Assessment Carcinogenicity:

Oxadiazon has been shown to cause liver tumors in lifetime feeding studies in rats and mice.

Reproductive Toxicity:

Oxadiazon was not a primary reproductive toxicant in a multigeneration reproduction study in rats. Reproductive effects were observed only at doses that caused systemic toxicity in adult rats.

Developmental Toxicity:

Oxadiazon was not a primary developmental toxicant in rats and rabbits. Developmental effects were observed but were considered secondary to maternal toxicity.

Neurotoxicity:

Oxadiazon did not demonstrate the potential to cause neurotoxicity in standard toxicity studies using laboratory animals.

Mutagenicity:

Oxadiazon is not considered mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

XII. ECOLOGICAL INFORMATION

Toxicity to Fish:

Oncorhynchus mykiss (rainbow trout)

LC₅₀: 1.2 mg/L

Exposure time: 96 h

The value mentioned relates to the active ingredient oxadiazon.

Toxicity to Aquatic Plants:

Skeletonema costatum

EC₅₀: 0.0056 mg/L

Exposure time: 120 h

The value mentioned relates to the active ingredient oxadiazon.

Aquatic Invertebrates:

Water flea (*Daphnia magna*)

EC₅₀: > 2.4 mg/L

Exposure time: 48 h

The value mentioned relates to the active ingredient oxadiazon.

Bioaccumulation: *Bluegill sunfish* BCF: 1,111
The value mentioned relates to the active ingredient oxadiazon.

Environmental Precautions: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not apply when weather conditions favor runoff or drift. Apply this product as specified on the label.

XIII. DISPOSAL CONSIDERATIONS

Disposal Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

Container Disposal Do not re-use empty containers. Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

XIV. TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION:
Not regulated for Domestic Surface Shipment
FREIGHT CLASSIFICATION:
Insecticides or Fungicides, N.O.I.; other than poison

XV. REGULATORY INFORMATION

US Federal Regulations

TSCA list

1,2-Propanediol 57-55-6

Nonyl phenoxy (polyethyleneoxy) ethanol 10 EO 68412-54-4

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

Oxadiazon 19666-30-9 1.0%

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Oxadiazon 19666-30-9

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Oxadiazon 19666-30-9 Developmental toxin.

US State Right-To-Know Ingredients

Oxadiazon	19666-30-9	NJ
1,2-Propanediol	57-55-6	MN, RI

Canadian Regulations

Canadian Domestic Substance List

1,2-Propanediol	57-55-6
Nonyl phenoxy (polyethyleneoxy) ethanol 10 EO	68412-54-4

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

Oxadiazon	19666-30-9
1,2-Propanediol	57-55-6

XVI. OTHER INFORMATION

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