



SHREEJI PESTICIDES PVT. LTD
(A SUBSIDIARY OF WILLOWOOD CHEMICALS PVT. LTD)

Material safety data sheet OXYFLUORFEN 23.5% EC

1. IDENTIFICATION OF COMPANY & PRODUCT

Product Name : Oxyfluorfen 23.5 % EC
Chemical Name : 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl) benzene
Users : Agricultural chemical for the selective control of certain broadleaf and grass weeds.
Molecular Formula : C₁₅H₁₁ClF₃NO₄
Manufacturer : SHREEJI PESTICIDES PVT LTD.
Address : Plot No. 69/P, Village - Manjusar, Tal. Savli, Dist. Vadodara - 391775
Gujarat, India :
Tele Fax Number 91 2667 264701

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Cas #	Percent Or Content(W/W)
Oxyfluorfen	42874-03-3	24.0
N-methyl-2-pyrrolidone (NMP)	872-50-4	10.8
Aromatic hydrocarbon	--	60.6
Other ingredients determined not to be hazardous	--	to 100

3. HEALTH HAZARDS IDENTIFICATION

Hazard Classification : Hazardous according to the criteria of NOHSC Australia otherwise
Risk Phrases : R36/38 Irritating to eyes and skin. R55 Harmful, may cause lung damage if swallowed.
Safety Phrases : -

4. FIRST AID MEASURES

Description of Necessary

First Aid Measures : In case of poisoning by any exposure route contact a doctor or Poisons Information Centre on 131 126. Have the product label or SDS with you when calling or going for treatment.



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Ingestion	: Do not induce vomiting unless told to do so by Poisons Information Centre or doctor. Do not give anything by mouth to an unconscious person.
Eye contact	: Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1 to 2 minutes and continue flushing for several additional minutes.
Skin contact	: Remove material from skin by washing with soap and plenty of water. Remove contaminated clothing and wash before reuse. Discard items which cannot be decontaminated such as shoes belts and watchbands.
Inhalation	: Move person to fresh air. If person is not breathing give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel.
Poisoning Symptoms	: Poisoning symptoms in laboratory animals were non-specific. Treat
Medical Advice	: symptomatically. If lavage is performed suggest endotracheal and /or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying stomach.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use carbon dioxide, dry chemical, water spray or foam.

Hazards from Combustion Products: Combustion generates toxic fumes of hydrogen chloride, hydrogen fluoride, and nitrogen oxides.

Special Protective Precautions and Equipment for Fire Fighters: Avoid breathing smoke, Remain upwind. Wear self-contained breathing apparatus and full protective gear. Use water spray to cool containers exposed to fire. Contain run-off.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures: In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways.

Methods and Materials for Containment and Clean Up:

- (1) Keep all bystanders away.
- (2) Wear full length clothing and PVC gloves.
- (3) Re-position any leaking containers so as to minimize further leakage.



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- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed spill into drums.
- (6) Disposal of the absorbed material will depend upon the extent of the spill.
- For quantities up to 50L of product bury in a secure landfill site.
 - For quantities greater than 50L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.

7. HANDLING AND STORAGE

Precautions for Safe Handling

: Will damage eyes and will irritate the skin. Avoid contact with eyes and skin. When opening the container, preparing spray and using the prepared spray,

Wear:

- Cotton overalls buttoned to the neck and wrist
- Washable hat
- Elbow-length butyl rubber gloves
- Goggles

If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

Conditions for Safe Storage

: Store in the closed, original container in a dry, cool well-ventilated area out of direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection

- **Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.
- **Hand protection:** Wear suitable gloves resistant to chemical penetration.
- **Skin protection:** Wear suitable protective clothing Chemical resistant boots.
- **Eye protection:** Chemical goggles or face shield with safety glasses.



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Industrial hygiene: Good ventilation of the workplace required. Wash thoroughly after handling. When using, do not eat, drink or smoke.

Occupational Exposure Limits: Not established.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear brown liquid
Odour	: Aromatic solvent odour
pH	: Not available
Vapor Pressure	: 0.29 mm Hg at 20°C (NMP)
Flash Point	: 97 °C (closed cup)
Upper and Lower Flammable (Explosive) Limits in Air	: Not known
Ignition Temperature	: 346 °C (NMP)
Boiling Point/Range	: >200 °C
Freezing/Melting Point	: Not available.
Solubility	: Emulsifiable in water
Specific Gravity	: 1.08
Explosive Properties	: Not available
Oxidizing Properties	: Not available
Combustibility	: Combustible C1
Corrosiveness	: Not available



10. STABILITY AND REACTIVITY

Chemical Stability : Stable under normal storage conditions.

Conditions to Avoid : Avoid contact with ignition sources.

Incompatible

Materials : Avoid contact with strong acids, bases amines, oxidizing agents, halogens and sodium hypochlorite.

Hazardous Decomposition

Products : Thermal decomposition may yield the following: hydrogen chloride, hydrogen fluoride and nitrogen oxides.



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Hazardous Reactions : None known to occur.

11. TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:

Acute:

Oral toxicity : Oral LD50 (rat) 2985 – 4594 mg/kg (similar formulation) Low toxicity if swallowed, however swallowing larger amounts may cause injury. Aspiration into lungs may occur during ingestion or vomiting causing lung damage or chemical pneumonia.

Dermal toxicity: Dermal LD50 (rat) > 4000 mg/kg (similar formulation)

Inhalation : LC50 (rat) > 4.8 mg/kg for 4 hours. Excessive exposure may cause irritation to the upper respiratory tract and lungs. May cause central nervous system effects. Symptoms of excessive exposure and drowsiness may be observed.

Skin irritation : Brief contact may cause skin irritation with pain and local redness.

Eye irritation : May cause moderate eye irritation and slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness.

Acute Sensitization : Skin contact may cause allergic reaction.

Chronic: Oxyfluorfen has been seen to have effects on bone marrow, spleen, liver, kidney, blood, adrenals and urinary bladder. It has caused cancer in some animals has had toxic effects on the fetus but only at doses toxic to the mother. Effects on reproduction have been seen but only at doses toxic to the parent. No mutagenic effects have been seen. NMP has caused toxic effects to the fetus in lab animals at high doses with either mild or undetectable maternal toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity : Oxyfluorfen is very highly toxic to aquatic organisms.
EC50 blue-green alga (*Anabaena flos-aquae*) > 0.2 mg/L
EC50 growth inhibition in duckweed is 0.0003 mg/L
Oxyfluorfen is practically nontoxic to birds, LD50 > 2000mg/kg
LC50 earthworm (*Eisenia foetida*) > 1000 mg/kg.

Persistence and Degradability : Biodegradation of Oxyfluorfen under anaerobic conditions is below detectable limits.

Bio accumulative



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Potential : Bio concentration of Oxyfluorfen is moderate (BCF of 100-3000)

13. DISPOSAL CONSIDERATIONS

Disposal Methods and Containers : Triple, or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Special Precautions for Landfill or Incineration : Not applicable

14. TRANSPORT INFORMATION

LAND TRANSPORT

ADG Not a dangerous good in Australia

UN Number : None allocated

UN Proper Shipping

Name : None allocated

Class : None allocated

Subsidiary Risk : None allocated

Packing Group : None allocated

Special Precautions

For User : None allocated

Hazchem Code : None allocated

SEA TRANSPORT

IMDG

UN Number : 3082

UN Proper Shipping

Name : Environmentally Hazardous Substance, Liquid, N.O.S. (Oxyfluorfen)

Class : 9

Subsidiary Risk : None allocated

Packing Group : III

Special Precautions

For User : None



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Hazchem Code : 2X
Marine Pollutant : Yes

15. REGULATORY INFORMATION

APVMA Product Number: 62182
Poisons Schedule (SUSDP): 5 (CAUTION)

16. OTHER INFORMATION

The information provided in this MSDS is sourced from published material which have been conducted according to Regulatory requirements including OECD and CIPAC Guidelines and EC Directives. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.