



## MATERIAL SAFETY DATA SHEET

### Manufacturer/information service:

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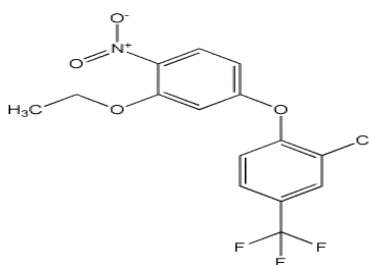
### 1. Chemical Product Identification

Product Name: Oxyfluorfen 95% TC

Molecular Formula: C<sub>15</sub>H<sub>11</sub>O<sub>4</sub>NF<sub>3</sub>Cl

Molecular Weight: 361.70

Structural Formula:



Chemical Name: 2-chloro- $\alpha,\alpha,\alpha$ -trifluoro-p-tolyl 3-ethoxy-4-nitrophenyl ether (IUPAC)

CAS No.: 42874-03-3

### 2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Oxyfluorfen	42874-03-3	95.0
Other ingredients	---	5.0

### 3. Hazards Identification

This product is considered to be hazardous and contains hazardous components.

Most important adverse physicochemical: Flammable.

Adverse human health effects: Harmful by inhalation. Irritating to eyes and skin.



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Environmental hazard: Toxic to aquatic organisms.

#### **4. First Aid Measures**

Inhalation: Remove victim to fresh air. If breathing is difficult, give oxygen. Seek medical advice.

Skin contact: Remove contaminated clothing and shoes. After contact with skin, wash immediately with plenty of water.

Eye contact: In case of eye contact, immediately rinse with clean water for 20-30 minutes. Seek medical attention immediately.

Ingestion: Rinse mouth. Never give anything by mouth to an unconscious person. Seek medical advice.

Note to physician: No specific antidote known. Treat symptomatically. Give supportive therapy

#### **5. Fire-Fighting Measures**

Extinguishing media: This product is a combustible liquid (C1). Flash point is at 98°C. Extinguish fire using foam, carbon dioxide, or dry agent. If water spray is used, contain all runoff.

Hazards from combustion products: Will produce toxic and noxious vapours (eg. Hydrogen chloride, carbon monoxide and hydrogen fluoride) when burnt. There is a risk of containers exploding if large quantities are involved in a fire. Will not polymerise.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

#### **6. Accidental Release Measures**

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow length butyl rubber gloves and goggles.

In the case of spillage, stop leak if safe to do so, and contain spill. and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Keep out animals and unprotected persons. After spills, wash area preventing runoff from



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entering drains. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use. Contain all runoff.

## **7. Handling and Storage**

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Wear protective equipment to prevent skin and eye contamination.

When opening the container and preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist, washable hat, elbow length butyl rubber gloves and goggles. Wash hands after use. After each day's use, wash gloves, goggles and contaminated clothing.

Conditions for Safe Storage: Store product in the closed, original container in a cool, well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight.

## **8. Exposure Controls/Personal Protection**

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Chemical goggles or face shield with safety glasses.

Skin Contact: Wear suitable protective clothing Chemical resistant boots.

Respiratory: In case of insufficient ventilation, wear suitable respiratory equipment.

## **9. Physical and Chemical Properties**

Appearance: Brown crystalline solid

Melting point: 84.5-86.0°C

pH: 6.0-9.0

Vapor pressure: 0.026 mPa at 25°C

Solubility in water and organic solvents (at stated temperature): In water: 0.116 mg/L at 20°C;

In organic solvent: Acetone 134 g/L, n-heptane 3.8 g/L, Methanol 30 g/L, Ethyl acetate 132 g/L ( all at 20°C)

## **10. Stability and Reactivity**

Stability: Stable under normal use and storage conditions.



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Conditions to avoid: Avoid heat sources - combustible liquid (C1).

Incompatible materials: Strong oxidizing agent such as chlorates, nitrates, peroxides etc.

Hazardous decomposition products: None under normal conditions. In a fire toxic and noxious gases are likely to be released.

Hazardous reactions: Material is not known to polymerize.

## **11. Toxicological Information**

Acute oral LD50 for rat: >5000 a.i.mg/kg.

Acute dermal LD50 for rat: >5000 a.i.mg/kg.

Inhalation LC50 (4 h) for rat: >3.71 a.i.mg/L.

Skin irritation: Mild skin irritant (rabbits).

Eye irritation: Mild to moderate eye irritant (rabbits).

Skin sensitization: Not a skin sensitiser (guinea pigs).

## **12. Ecological And Ecotoxicological Information**

Effect on birds: moderate toxicity to birds, acute oral LD50 for Bobwhite quail is >947 a.i.mg/kg.

Effect on fish: moderate toxicity to fish, acute 96 hour LC50 for Rainbow trout is 0.25 a.i.mg/L.

Effect on aquatic invertebrates: high toxicity to aquatic invertebrates, acute 48 hour EC50 for Daphnia magna is 0.072 a.i.mg/L.

Effect on algae: moderate toxicity to algae, acute 72 hour EC50 for Pseudokirchneriella subcapitata is >2.0 a.i.mg/L.

Effect on honeybees: low toxicity to honeybees, contact acute 48 hour LD50 is >100 a.i.µg/bee; oral acute 48 hour LD50 is >100 a.i.µg/bee.

Effect on earthworms: low toxicity to earthworms, acute 14 day LC50 for Eisenia foetida is >1000 a.i.mg/kg.

## **13. Disposal Considerations**

After Spill or accident:

Clear area of all unprotected personnel. Wear full protective clothing and equipment including chemical resistant butyl rubber gloves (see section 8). Dispose of drummed waste and decontamination solution in accordance with the requirements of Local Authorities or



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State Waste Management Authorities. Do not cut or weld metal containers. Prevent spill from spreading or entering waterways, sewers or underground drains.

Disposal of empty containers after intended use:

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 deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn, cut or saw empty containers, as there is the possibility that fumes inside the container maybe ignited and cause the container to explode.

## 14. Transport Information

Not applicable

## 15. Regulatory Information

Not applicable

## 16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.