



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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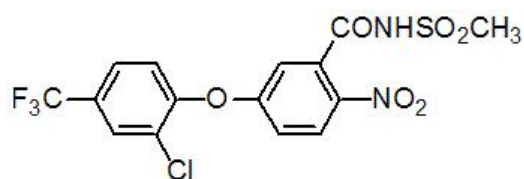
1. Chemical Product Identification

Common Name: Fomesafen 95% TC

Molecular Formula: $C_{15}H_{10}ClF_3N_2O_6S$

Molecular Weight: 438.76

Structural Formula:



Chemical Name: 5-(2-chloro- α,α,α -trifluoro-p-tolyloxy)-N-mesyl-2-nitrobenzamide

Form: Powder

Color: White or light yellow

CAS No.: 72178-02-0

2. Composition / Information On Ingredients

| Composition | CAS No. | Content % |
|-------------------|------------|-----------|
| Fomesafen | 72178-02-0 | 95 |
| Other ingredients | --- | 5 |

3. Hazards Identification

Symptoms of Acute Exposure: Causes eye and skin irritation. Toxic if swallowed or absorbed through the skin. Allergic skin reactions are possible.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic



gases.

Unusual Fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. First Aid Measures

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Then call a doctor.

Eye Contact: if present, after 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 an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

5. Fire-Fighting Measures

Unusual Fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire: Use dry chemical, foam or CO₂ extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

Flammability: Not Flammable

Flash Point (Test Method): > 212°F

6. Accidental Release Measures

Personal Precautions: Avoid contact with the skin and the eyes. Use personal protective equipment.

Environmental Precautions: Consult a regulatory specialist to determine appropriate state or



local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits..

Methods for Clean-up: Take up mechanically and collect in suitable container for disposal.

7. Handling And Storage

Handling: Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Keep out of reach of children.

Storage: Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

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: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

9. Physical and Chemical Properties

Appearance: White or light yellow powder

pH: 5.0-9.0

Loss on drying: $\leq 1.0\%$

Insoluble in Acetone: $\leq 0.5\%$

Melting point: 219°C

Bulk density: 1.61 g/ml

Partition Coefficient: $\log P = -1.2$ (at pH 7, 20°C)

Vapour pressure: 4×10^{-3} mPa (25°C)

Solubility: 50 mg/l in water (20°C); In organic solvents: 300 g/l in acetone, 256 g/l in methanol, 1.9 g/l in xylene, 10 g/l in dichloromethane (all at 20°C).



10. Stability and Reactivity

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Materials to Avoid: Oxidizing agents.

11. Toxicological Information

Acute oral LD50 for rat: 1250 a.i.mg/kg.

Acute dermal LD50 for rabbit: >1000 a.i.mg/kg.

Inhalation LC50 (4 h) for rat: >4.97 a.i. mg/L.

Skin irritation: Mild-irritating to skin (rabbits).

Eye irritation: Mild to moderate-irritating to eyes (rabbits).

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

12. Ecological And Ecotoxicological Information

Effect on birds: low toxicity to birds, acute LD50 for Mallard ducks is 5000 a.i.mg/kg.

Effect on fish: low toxicity to fish, acute 96 hour LC50 for Rainbow trout is 170 a.i.mg/L.

Effect on aquatic invertebrates: low toxicity to aquatic invertebrates, acute 48 hour EC50 for Daphnia magna is 330 a.i.mg/L.

Effect on algae: moderate toxicity to algae, acute 72 hour EC50 is 0.17 a.i.mg/L.

Effect on honeybees: moderate toxicity to honeybees, oral acute 48 hour LD50 is 50 a.i.µg/bee.

Effect on earthworms: moderate toxicity to earthworms, acute 14 day LC50 is 1000 a.i.mg/kg.

13. Disposal Considerations

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

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.