



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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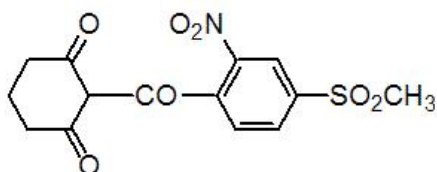
1. Chemical Product Identification

Common Name: Mesotrione 96% TC

Molecular Formula: C₁₄H₁₃NO₇S

Molecular Weight: 339.32

Structural Formula:



Chemical Name: 2-(4-mesylyl-2-nitrobenzoyl)cyclohexane-1,3-dione

Form: Solid

Color: Shallow yellow

CAS No.: 104206-82-8

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Mesotrione	104206-82-8	96
Other ingredients	---	4

3. Hazards Identification

Symptoms of Acute Exposure: May cause mild eye and skin irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic



gases.

Unusual Fire, Explosion and Reactivity Hazards: Flammable hydrogen gas may be formed on contact with incompatible metals. See "Conditions to Avoid", Section 10. Can decompose at high temperatures forming toxic gases.

4. First Aid Measures

Eye: Contact Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.

Inhalation: Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration. Call a poison control center or doctor for further treatment advice.

Ingestion: Call a physician or Poison Control Center immediately Have person sip a glass of water if able to swallow Do not induce vomiting unless told to do so by a poison control center or doctor Never give anything by mouth to an unconscious person

5. Fire-Fighting Measures

Unusual Fire, Explosion and Reactivity Hazards: Flammable hydrogen gas may be formed on contact with incompatible metals. Can decompose at high temperatures forming toxic gases.

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.

6. Accidental Release Measures

In Case of Spill or Leak: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent. Pick up wash liquid with additional absorbent and place into



compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. Handling And Storage

Spray solutions of this product should be mixed, stored and applied using only plastic, plastic-lined steel, stainless steel or fiberglass containers. Concentrate should not be stored in mild steel, cast iron or aluminum containers. Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

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.

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.

Inhalation: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

9. Physical and Chemical Properties

Appearance: Shallow yellow solid

pH: 6.0-9.0

Moisture: $\leq 0.5\%$

Melting point: 165.3°C

Boiling point: Decomposes before boiling

Bulk density: 1.49 g/ml

Partition Coefficient: $\log P = 0.11$ (at pH 7, 20°C)

Vapour pressure: 5.7×10^{-3} mPa (25°C)

Solubility: 1.5 g/l in water (20°C); In organic solvents: 93.3 g/l in acetone, 3.1 g/l in toluene,



18.6 g/l in ethyl acetate, 1.6 g/l in xylene (all at 20°C).

10. Stability and Reactivity

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Concentrate should not be stored in mild steel, cast iron or aluminum containers. Spray solutions should not be mixed, stored or applied in containers other than plastic, plastic-lined steel, stainless steel or fiberglass.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

11. Toxicological Information

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

Acute dermal LD50 for rat: >2000 a.i.mg/kg.

Inhalation LC50 (4 h) for rat: >4.75 a.i. mg/L

Skin irritation: Non-irritant to skin (rabbits)

Eye irritation: Slightly irritant 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 Bobwhite quail is >3776 a.i.mg/kg.

Effect on fish: low toxicity to fish, acute 96 hour LC50 for Bluegill sunfish is >120 a.i.mg/L.

Effect on aquatic invertebrates: low toxicity to aquatic invertebrates, acute 48 hour EC50 for Daphnia magna is >622 a.i.mg/L.

Effect on algae: moderate toxicity to algae, acute 72 hour EC50 for Raphidocelis subcapitata is 3.5 a.i.mg/L.

Effect on honeybees: low-moderate toxicity to honeybees, contact acute 48 hour LD50 is >100 a.i.µg/bee, oral acute 48 hour LD50 is >11 a.i.µg/bee.

Effect on earthworms: low toxicity to earthworms, acute 14 day LC50 for Eisenia foetida is >2000 a.i.mg/kg.

13. Disposal Considerations

Do not reuse product containers. Dispose of product containers, waste containers, and



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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.