



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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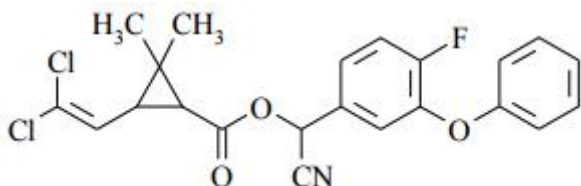
1. Chemical Product Identification

Product Name: Beta-cyfluthrin 95% TC

Molecular Formula: $C_{22}H_{18}Cl_2FNO_3$

Molecular Weight: 434.29 g/mol

Structural Formula:



Chemical Name: (R)- α -cyano-4-fluoro-3-phenoxybenzyl (1S,3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and (S)- α -cyano-4-fluoro-3-phenoxybenzyl (1R,3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Form: Powder

Color: White or light yellow

CAS No.: 68359-37-5

2. Composition / Information On Ingredients

| Composition | CAS No. | Content % |
|-------------------|------------|-----------|
| Beta-cyfluthrin | 68359-37-5 | 95.0 |
| Other ingredients | | 5.0 |



3. Hazards Identification

May irritate eyes and skin. Not flammable.

4. First Aid Measures

Eye: 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.

Skin: Take off all contaminated clothing immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation: Move 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

Suitable Extinguishing Media: Water, dry chemical.

Fire Fighting Instructions: Keep out of smoke. Stay upwind. Do not allow run-off from fire fighting to enter drains or water courses. Equipment or materials involved in pesticide fires may become contaminated. Wear self-contained breathing apparatus and protective suit.

6. Accidental Release Measures

Land Spill or Leaks: Avoid dust formation. Avoid breathing dust. Avoid contact with skin. Use recommended protective equipment while carefully sweeping up spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with soap and water. Rinse with water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be removed and disposed. Do not allow material to enter streams, sewers, or other waterways.

7. Handling And Storage



Handling: Handle and open container in a manner as to prevent spillage. Avoid contamination of feed and foodstuffs. Foods should be removed or covered before treatments. Food processing surfaces and equipment must be covered during treatment or cleaned with a suitable detergent and rinsed with potable water before reuse.

Storing: Do not contaminate water, food, or feed by storage or disposal. Do not freeze. Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

8. Exposure Controls / Personal Protection

Engineering Controls: Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Eye/Face Protection: Goggles

Hand Protection: Suitable chemical resistant gloves.

Body Protection: Wear long-sleeved shirt and long pants and shoes plus socks.

9. Physical And Chemical Properties

Appearance: White or light yellow powder

Loss on drying: $\leq 0.5\%$

pH: 4.0-6.0

Acetone insolubles: $\leq 0.5\%$

Density: 1.35 g/mL at 20°C

10. Stability And Reactivity

Stability: This is a stable material.

Hazardous Polymerization: Will not occur.

Incompatibilities: Alkaline media; reacts with methanol; incompatible with many disinfectants.

Instability Conditions: Not established

Decomposition Products: Not established

11. Toxicological Information

Acute oral LD₅₀ for rats is >77 a.i.mg/kg.



Acute dermal LD₅₀ for rats is >5000 a.i.mg/kg.

Acute inhalatio LC₅₀ (4 h) for rat: 0.081 a.i.mg/L.

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

Eye irritation: Slightly irritating to eyes (rabbits).

Skin sensitization: Non-sensitizing (guinea pigs).

12. Ecological And Ecotoxicological Information

Effect on birds: low toxicity to birds, acute LD₅₀ for Bobwhite quail >2000 a.i.mg/kg.

Effect on fish: high toxicity to fish, acute 96 hour LC₅₀ for Salmonidae is 0.000068 a.i.mg/L.

Effect on aquatic invertebrates: high toxicity to aquatic invertebrates, acute 48 hour EC₅₀ for Daphnia magna is 0.00029 a.i.mg/L.

Effect on algae: low toxicity to algae, acute 72 hour EC₅₀ for Scenedemus subspicatus is >10 a.i.mg/L.

Effect on honeybees: high toxicity to honeybees, contact acute 48 hour LD₅₀ is 0.001 a.i.µg/bee; Oral acute 48 hour LD₅₀ is 0.05 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

Waste Disposal Method: Follow container label instructions for disposal of wastes generated during use. In other situations, bury in an approved landfill or burn in an incinerator approved for pesticide destruction.

Empty Container Precautions: Do not reuse container without written permission and instructions from Bayer. Empty, clean and dispose in accordance with state and local laws.

14. Transport Information

Not applicable

15. Regulatory Information

Not applicable

16. Other Information



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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.