



Hangzhou Tianlong Biotechnology Co., Ltd.

Add: Room 1906, Fengqi Times Tower, No.338, Fengqi East Road, Hangzhou, Zhejiang, China.

MATERIAL SAFETY DATA SHEET

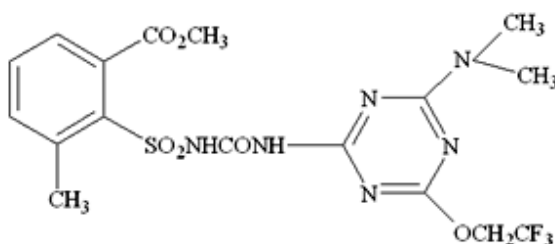
1. Chemical Product and company Identification

Product Name: Triflusulfuron-methyl

Molecular Formula: C₁₇H₁₉F₃N₆O₆S

Molecular Weight: 492.4289

Structural Formula:



Chemical Name: methyl 2-[4-dimethylamino-6-(2,2,2-trifluoroethoxy)-1,3,5-triazin-2-ylcarbamoysulfamoyl]-*m*-toluate

CAS No.: 126535 15-7.

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

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2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Triflusulfuron-methyl	126535-15-7	95.0
Other ingredients		1.0

3. Hazards Summarizing

Routes of exposure:

Inhalation, ingestion, skin

Eye: Contact may cause severe eye irritation and possible eye damage. May causes chemical conjunctivitis and corneal damage.

Skin: May be harmful if absorbed through the skin. May causes irritation and dermatitis. May causes cyanosis of the extremities.

Ingestion: Harmful if swallowed. May causes gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.

Inhalation: Causes respiratory tract irritation. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. Cause irritation of the mucous membrane and upper respiratory tract. May causes burning sensation in the chest.

Chronic: Not available.

4. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

5. Fire-Fighting Measures

Use water fog, water, water spray, foam, CO₂ or dry chemical extinguishing media. Firefighters should be equipped with self-contained breathing apparatus and turn out gear. If product is heated above 140°C, the solid or solid residue from solutions decomposes exothermically, liberating toxic hydrogen bromide fumes and oxides of nitrogen, and wells up to give a tarry mass which burns readily. If fire cannot be controlled and containers are heated, evacuate the area!

6. Accidental Release Measures

Personal cautions: safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants and hats.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Sweep up, then place into a suitable container for disposal. Remove all sources of ignition. Use a spark-proof tool. A vapor suppressing foam may be used to reduce vapors.

7. Handling and Storage

Handling: Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Store protected from moisture.

8. Exposure Controls/Personal Protection

Engineering Controls: Use adequate general or local explosion-proof

ventilation to keep airborne levels to acceptable levels.

Personal Protective Equipment

Eyes: Wear safety glasses and chemical goggles if splashing is possible.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

9. Physical and Chemical Properties

Form: crystalline powder

Color: off-white

Melting point: 160-163°C.

Boiling point: Not available

Specific gravity: Not available

Vapor Pressure: $<1 \times 10^{-7}$. mm Hg at 25°C

10. Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Ignition sources, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong bases, acid chlorides, acid anhydrides, moisture.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen bromide, nitrogen.

Hazardous Polymerization: Has not been reported.

11. Toxicological Information

Toxicity to Animals:

Inhalation, rat: LC50 = >5 gm/m³/6H;

Inhalation, rat: LC50 = 800 mg/m³/4H;

Oral, mouse: LD50 = 270 mg/kg;

Oral, mouse: LD50 = 194 mg/kg;

Oral, rabbit: LD50 = 190 mg/kg;

Oral, rat: LD50 = 180 mg/kg;

Oral, rat: LD50 = 267 mg/kg;

Skin, rat: LD50 = 1600 mg/kg;

Teratogenicity: No information found

Reproductive Effects: No information found

Mutagenicity: No information found

12. Ecological Information

Ecotoxicity: not available.

Product of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation:

The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Methods of disposal:

After use: Triple rinse empty container with water and empty contents into spray tank. Destroy the empty container by puncturing and crushing.

Dispose of destroyed container by taking to an approved council disposal site or alternatively bury under at least 50cm of soil in a location away from houses, crops, water supply, and ground water.

14. Transport Information

Not Regulated

15. Regulatory Information

Safety Phrases: Keep out of reach of children

Keep away from food, drink and animal feeding stuff

Do not breathe spray

When using do not eat, drink or smoke

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible)

Use appropriate containment to avoid environmental contamination

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.