Ethametsulfuron-methyl-MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

ZHEJIANG RAYFULL CHEMICALS CO.,LTDADD: NO.113 PUXING ROAD, PUZHOU INDUSTRIAL PARK, LONGWAN DISTRICT,WENZHOU ZHEJIANG P.R. CHINATel: +86-577-88905587Fax: +86-577-88905587Fax: +86-577-88905567Email: info@rayfull.comsales@rayfull.com

1. Chemical Product Identification

Product Name: Ethametsulfuron-methyl Molecular Formula: C₁₅H₁₈ N₆O₆S Molecular Weight: 410.41 Structural Formula:



Chemical Name: methyl

2-[(4-ethoxy-6-methylamino-1,3,5-triazin-2-yl)carbamoylsulfamoyl]benzoate

Color: Light tan

Form: Solid

Odor: Odorless

CAS No.: 97780-06-8

2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Ethametsulfuron-methyl	97780-06-8	95.0
Other ingredients		5.0

3. Hazards Identification

Component	Symbol	R phrases
Pendimethalin		

More important danger for the man: May cause eye and skin irritation, prolonged or

frequently repeated skin contact may cause an allergic reaction in some individuals.

Dangers for the environment: Not applicable Physical-chemical dangers: Not applicable

4. First Aid Measures

If poisoning occurs, immediately contact a doctor or Poisons Information Centre, and follow the advice given. Show this Material Safety Data Sheet to a doctor.

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 further treatment advice.

Skin: 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.

Ingestion: If swallowed, drink 1 or 2 glasses of water (or milk) and induce vomiting by touching the back of the throat with finger. If possible, contact a physician, Poison Control Center, or emergency center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Take person and product container to the nearest emergency treatment center.

Inhalation: If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Note to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-Fighting Measures

Extinguishing media: Dry chemical, water spry, CO₂;

Don't use: not applicable;

Particular risk: Toxic irritating gases may be formed under fire conditions;

Measures of personal protection: safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants.

6. Accidental Release Measures

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

Cleaning methods

EX: Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

Environmental cautions

EX: prevent the contamination of the floor and of beds of water. Isolate contaminated water.

7. Handling and Storage

Handling: Avoid getting in eyes or on skin, or clothing and breathing dust. Remove contaminated clothing immediately. Wash thoroughly after handling.

Storage: Keep in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

Fire and explosion protection: the area must be far from fire and flammable materials.

8. Exposure Controls/Personal Protection

Personal protective equipment

Respiratory protection: approved respirator;

Protective gloves: rubber gloves;

Eye protection: goggles;

Industrial hygiene: use good industrial hygiene. Wear face shield or goggles, elbow length PVC gloves, cotton overalls buttoned to the neck and wrist, washable hat and half face respirator with dust and vapor cartridge. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

9. Physical and Chemical Properties

Appearance: Light tan solid;

Melting point: 194°C;

Density: Not applicable;

Water solubility: 50 mg/l (20°C);

Degradation point: Not applicable;

Flash point: Not applicable;

Ignition temperature: Not applicable.

10. Stability and Reactivity

Stability: stable under the normal conditions;
Conditions to avoid: Fire, heat and high temperature;
Products to avoid: None reasonably foreseeable;
Hazardous decomposition products: Hydrogen chloride and nitrogen oxides.

11. Toxicological Information

Acute oral LD₅₀ for rat: >5000 mg/kg;

Acute dermal LD₅₀ for rat: >2000 mg/kg;

Inhalation LD_{50} (4h) for rat: 5.7 mg/m³;

Moderate irritating to rabbit skin;

Non-irritating to rabbit eye;

Dermal sensitisation: Not a sensitizer.

Chronic toxicity: Two groups of six male rats treated orally by gavage with the vehicle, corn oil or ethametsulfuron methyl at 2200 mg/kg bw/day for 10 days over a two-week period revealed treatment-related toxicity which was manifest as multifocal necrosis of epithelial cells and accumulation of protein droplets within cells of the renal proximal tubules.

Reproductive effects: A two generation, 4 litter reproduction study with rats treated at dietary levels of 0, 250, 5000, 20000ppm of ethametsulfuron methyl failed to reveal any evidence suggestive of an adverse effect on reproductive potential. A NOEL was indicated at the mild dose level of 5000ppm decreased body weights in the high dose 20000ppm treated F0 and F1 generation males. In the absence of any associated clinical or pathological fingings, differences in organ weights were considered to be of doubtful biological significance.

Teratogenic effects: A teratogenicity study in rats when administered 0, 60, 250, 1000 or 4000 mg/kg bw/day of ethameesulfuron methyl orally by gavage on days 7-16 of gestation indicated a NOEL of 1000 mg/kg bw/day with respect to maternal toxicity based on slightly decreased weight gain and significantly depressed food intake in the 4000 mg/kg bw/day dose group. There was no evidence of any embryotoxicity. There was no strong evidence to support the possibility of a trend for delayed skeletal development at the lower levels of 250 and 1000 mg/kg bw/day.

Mutagenic effects: A series of mutagenicity studies did not show any potential for microbial and mammalian point mutation, chromosomal aberration or any evidence of DNA damage.

12. Ecological And Ecotoxicological Information

Effects on birds:

LD₅₀ for wild duck: 2250 mg/kg;

Effects on aquatic organisms:

 LC_{50} (96h) for rainbow trout, sunfish: >600 mg/l;

EC₅₀ (48h) for daphnia magna: 34 mg/l.

Effects on other organisms:

LD₅₀(48h) for bees: $>0.012 \mu g/bee$;

LC₅₀ (14d) for earthworms: 1 mg/kg.

13. Disposal Considerations

Material that cannot be used at the site should be disposed of in an approved waste disposal facility following all applicable Federal, State and Local regulations. If burned, stay out of smoke. Do not contaminate water supplies by disposal of wastes or containers.

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.