



Safety Data Sheet

Report Date 11-May-16

Page 1 of 5

1. Identification

Product Name : SINISTER
Synonyms : None
Product Use : Selective Broadleaf Herbicide
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Slightly irritating
Eye Irritation : Mildly irritating
Acute Toxicity Oral : 5,000 mg/kg (female rat)
Acute Toxicity Dermal : >5,050 mg/kg (rats)

Hazard Categories : Oral/Dermal/Inhalation Toxicity-5/5/4; Eye/Skin Irritation-2B/3; STOT-Repeated Exposure-2

Hazard Statement : May be harmful if swallowed
May be harmful in contact with skin
Causes eye irritation
Causes mild skin irritation
Harmful if inhaled
May cause damage to organs (kidney) through prolonged or repeated exposure

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Fomesafen: 5-[2-chloro-4-(trifluoromethyl) phenoxy]-N-(methylsulfonyl)-2-nitrobenzamide	72178-02-0	28.65
Other ingredients	Proprietary	71.35



Safety Data Sheet

Report Date 11-May-16

Page 2 of 5

4. First Aid Measures

- Eye** : Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. Call a poison control center or doctor for treatment advice.
- Skin** : Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
- Inhalation** : Move to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
- Ingestion** : Call a poison control center or doctor immediately for treatment advice. 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. Do not give anything by mouth to an unconscious person.
- Indication of Immediate Medical Attention and Special Treatment Needed** : Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically.

5. Fire Fighting Measures

- Extinguishing Media** : Use dry chemical, foam or carbon dioxide extinguishing agents.
- Specific Hazards Arising from the Chemical** : Irritating and possibly toxic fumes may be generated by thermal decomposition or combustion.
- Special Fire Fight Proc** : Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area. Prevent use of contaminated buildings, area and equipment.

6. Accidental Release Measures

- Personal Precautions** : Isolate hazard area. Keep unnecessary personnel from entering the area.
- Protective Equipment** : NIOSH-certified air-purifying respirator with N,R,P or HE filter, chemical-resistant gloves, splashproof goggles, long-sleeved shirt and long pants, socks, shoes, eyewash station and emergency shower.
- Emergency Procedures** : Clean up spills immediately.
- Methods and Materials for Containment and Cleanup** : Control the spill at its source. Contain the spill to prevent spreading or contaminating soil or from entering sewers, drainage systems or any bodies of water. Clean up spills immediately, observing precautions to prevent exposure. Cover entire spill with absorbent material and place in compatible disposal containers. Scrub area with hard water detergent. Collect wash water with additional absorbent and place into disposal containers.

7. Handling and Storage

- Precautions for Safe Handling** : Wear chemical-resistant protective equipment when handling. Use in a well-ventilated area. Avoid contact with skin, eyes and clothing. Avoid contact with incompatible materials. Wash thoroughly after handling.



Safety Data Sheet

Report Date 11-May-16

Page 3 of 5

Conditions for Safe Storage : Keep out of reach of children and domestic animals. Keep in original container. Store at temperatures above 32 Degrees F. Store in a well-ventilated area, away from food, feed, beverages and tobacco products. Prevent eating, drinking, tobacco use and cosmetic application in storage area.

8. Exposure Controls / Personal Protection

TLV/PEL : Not established

Appropriate Engineering Controls : General and/or local exhaust is sufficient.

Personal Protective Equipment : Chemical-resistant gloves, splashproof goggles, long-sleeved shirt and long pants, socks, shoes, eyewash station and emergency shower.

9. Physical and Chemical Properties

Odor/Appearance : Clear amber to dark amber liquid; no to faint odor

Flash Point, °F : >95 Degrees C.

Boiling Point, °F : No information found

Melting Point(Freezing point), °C : No information found

Vapor Pressure, mm Hg @ 20 °C : No information found

Vapor Density : No information found

Solubility in Water : 100% Dispersible

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 °C : 1.182-1.202

Evaporation Rate(Butyl Acetate = 1) : No information found

Octanol/Water Partition Coefficient : No information found

pH : 7.0-8.0 (2.5%)

Flammable Limits (approximate volume % in air) : No information found

Auto-ignition Temperature : Not determined

Decomposition temperature : No information found

10. Stability and Reactivity

Reactivity : No information found.

Chemical Stability : Stable

Hazardous Decomposition Products : None known

Hazardous Polymerization : Will not occur

Conditions to Avoid : None known.

Incompatible Materials : Avoid contact with acids.



Safety Data Sheet

Report Date 11-May-16

Page 4 of 5

11. Toxicological Information

- Acute Toxicity (Oral LD50)** : 5,000 mg/kg (female rat). May be harmful if swallowed.
- Acute Toxicity (Dermal LD50)** : >5,050 mg/kg (rats). May be harmful in contact with skin.
- Acute Toxicity Inhalation LC50** : >2.33 mg/L (rats). Harmful if inhaled.
- Likely Routes of Exposure** : Eyes, skin, inhalation.
- Skin Irritation** : Causes mild skin irritation.
- Eye Irritation** : Causes eye irritation.
- Skin Sensitization** : Not considered a skin sensitizer.
- Carcinogenic** : Not listed by IARC, NTP or OSHA.
- Chronic Effects** : Specific Target Organ Toxicity-Repeated Exposure: May cause damage to organs through prolonged or repeated exposure (kidney).
- Other Hazards** : None currently known.

12. Ecological Information

- Ecotoxicity** : Fish (rainbow trout) 96-hour LC50 680 ppm; Invertebrate (water flea) Daphnia Magna 48-hour EC50 294 ppm; Bird (Mallard Duck) 14-day LD50 > 5,000 mg/kg (all data based on Fomesafen Technical).
- Persistence and Degradability** : Persistent in soil.
- Bioaccumulative Potential** : No information found.
- Mobility in Soil** : Highly mobile in soil.
- Other Adverse Effects** : Sinks in water (after 24 hours).

13. Disposal Considerations

- Waste Disposal Method** : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

- UN Proper Shipping Name** : Not regulated by DOT, IATA or IMDG.
- Transport Hazard Class** : None
- UN Identification Number** : None
- Packaging Group** : None
- Environmental Hazards** : None
- Transport in Bulk** : No special considerations needed.
- Special Precautions for Transportation** : None



Safety Data Sheet

Report Date 11-May-16

Page 5 of 5

Freight Classification : Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 2 Fire: 1 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No) :

Immediate(Acute) Health: Y
Delayed (Chronic) Health: Y
Sudden Release of Pressure:
Fire: N
Reactive: N

FIFRA Information : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Registration Number : 5905-593

FIFRA Signal Word : Warning

FIFRA Label Statement : Keep out of reach of children.

FIFRA Label Statement : Causes substantial but temporary eye injury.

FIFRA Label Statement : Harmful if swallowed.

FIFRA Label Statement : Do not get in eyes or on clothing.

FIFRA Label Statement : Wear protective eyewear (goggles, face shield or safety glasses).

FIFRA Label Statement : Wash thoroughly with soap and water after handling.

FIFRA Label Statement : Remove and wash contaminated clothing before reuse.

16. Other Information

Data of Preparation/Revision : 11-May-2016