



Safety Data Sheet

Report Date 17-Mar-15

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1. Identification

Product Name : TROUBADOUR 2F INSECTICIDE
Synonyms : None
Product Use : Methoxyfenozide Insecticide
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 (No symbol required)
Skin Irritation : Causes light skin irritation
Eye Irritation : Causes eye irritation
Acute Toxicity Oral : LD50 >5,000 mg/kg
Acute Toxicity Dermal : LD50 >2,000 mg/kg

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

Hazard Statement : May be harmful if swallowed
May be harmful in contact with skin
Causes eye irritation
Causes mild skin irritation
May be harmful if inhaled

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Methoxyfenozide	161050-58-4	22.6
Blend of formulation aids	Proprietary	77.4

4. First Aid Measures

Eye : Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing the eyes. Call a poison control center or doctor for treatment advice.
Skin : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to minutes. Call a poison control center or doctor for treatment advice.
Inhalation : Move to fresh air. If not breathing, call an ambulance or 911, then give artificial respiration. Call a poison control center or doctor for treatment advice.
Ingestion : No emergency medical treatment necessary.
Indication of Immediate Medical Attention and Special Treatment Needed : No specific antidote. Treatment of exposure should be directed at the control of the symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Extinguishing Media : Not a combustible or flammable liquid. Use extinguishing media suitable for underlying cause of fire.
Specific Hazards Arising from the Chemical : If exposed to fire from another source and water is evaporated, exposure to high temperatures may cause toxic fumes.
Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective clothing. Contain water from fire fighting, if possible, to prevent environmental damage.



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6. Accidental Release Measures

- Personal Precautions** : Avoid breathing vapors. Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Use chemical-resistant gloves, safety glasses, shoes plus socks.
- Emergency Procedures** : Prevent spills from entering soil, ditches, sewers, waterways and/or groundwater.
- Methods and Materials for Containment and Cleanup** : Contain spilled material if possible. Absorb with clay, dirt, sand or other similar materials. Sweep up and place in suitable, properly labeled containers.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children. Do not handle material near food, feed or drinking water. Avoid contact with skin and eyes.
- Conditions for Safe Storage** : Do not store near food, feed or drinking water. The minimum recommended storage temperature is 32 Degrees F. The maximum storage temperature is 104 Degrees F. Store in a well-ventilated area. Keep container tightly closed when not in use.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV or PEL established for this mixture.
- Appropriate Engineering Controls** : Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.
- Personal Protective Equipment** : Use chemical-resistant gloves, safety glasses, shoes plus socks.

9. Physical and Chemical Properties

- Odor/Appearance** : Off white liquid with mild odor.
- Flash Point, °F** : Not flammable
- Boiling Point, °F** : No data available
- Melting Point(Freezing point), °C** : No data available
- Vapor Pressure, mm Hg @ 20 °C** : No data available
- Vapor Density** : No data available
- Solubility in Water** : Not applicable
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.066
- Evaporation Rate(Butyl Acetate = 1)** : No data available
- Octanol/Water Partition Coefficient** : No information found
- pH** : 6-7
- Flammable Limits (approximate volume % in air)** : No data available
- Auto-ignition Temperature** : No data available
- Decomposition temperature** : No information found

10. Stability and Reactivity

- Reactivity** : No information found
- Chemical Stability** : Stable



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- Hazardous Decomposition** : Smoke may contain unidentified toxic and/or irritating compounds. May emit nitrogen oxides, carbon monoxide and carbon dioxide.
Products
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid contact with strong oxidizing agents.
Incompatible Materials : None currently known.

11. Toxicological Information

- Acute Toxicity (Oral LD50)** : >5,000 mg/kg
Acute Toxicity (Dermal LD50) : >2,000 mg/kg
Acute Toxicity Inhalation LC50 : >0.9 mg/L/4 hours (for aerosol). Mist may cause irritation of the upper respiratory tract.
Likely Routes of Exposure : Skin and eyes
Skin Irritation : Brief contact is essentially non-irritating to the skin.
Eye Irritation : Essentially non-irritating to the eyes.
Skin Sensitization : No information found
Carcinogenic : Not listed by IARC, NTP or OSHA.
Chronic Effects : Repeated exposures to the active ingredient may cause methemoglobinemia, thereby impairing the blood's ability to transport oxygen.
Other Hazards : In animals, effects have been reported on the following organs: blood, kidney, liver, thyroid.

12. Ecological Information

- Ecotoxicity** : No relevant information found
Persistence and Degradability : No relevant information found
Bioaccumulative Potential : No relevant information found
Mobility in Soil : No relevant information found
Other Adverse Effects : No relevant information found

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 : No information found
Transport in Bulk : No information found
Special Precautions for Transportation : None required
Freight Classification : Pesticides, NOI, Insecticides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

- National Fire Protection Association Rating** :



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Health: 0 Fire: 0 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: N
Delayed (Chronic) Health: Y
Sudden Release of N
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 : 62719-442-5905

FIFRA Signal Word : Caution

FIFRA Label Statement : Keep out of reach of children.

FIFRA Label Statement : Harmful if absorbed through skin or inhaled.

FIFRA Label Statement : Avoid contact with eyes, skin or clothing.

FIFRA Label Statement : Avoid breathing spray mist.

FIFRA Label Statement : No additional label statements.

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16. Other Information

Data of Preparation/Revision : 17-March-2015