



Safety Data Sheet

Report Date 23-Nov-15

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1. Identification

Product Name : TEMPEST DUAL-ACTION INSECTICIDE
Synonyms : None
Product Use : Bifenthrin-Imidacloprid 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 : Danger
Skin Irritation : Non-irritating to skin
Eye Irritation : Causes eye irritation
Acute Toxicity Oral : LD50 >175 mg/kg (rat)
Acute Toxicity Dermal : LD50 >5,000 mg/kg (rabbit)

Hazard Categories : Oral/Dermal/Inhalation Tox-3/5/4; Eye Irr-2B; STOT-SE-1; STOT-RE-1; Carcinogen-2

Hazard Statement : Toxic if swallowed
May be harmful in contact with skin
Causes eye irritation
Harmful if inhaled
Causes damage to organs
Causes damage to organs through prolonged or repeated exposure
Suspected of causing cancer

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Non-hazardous formulation aids	Proprietary	77.4
Imidacloprid	138261-41-3	11.3
Bifenthrin	82657-04-3	11.3



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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 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 to 20 minutes. Call a poison control center or doctor for treatment advice.
- Inhalation** : Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
- Ingestion** : Immediately call a poison control center or doctor. Have person 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 induce vomiting or give anything by mouth if unconscious.
- Indication of Immediate Medical Attention and Special Treatment Needed** : This product is a pyrethroid. If large amounts are ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils or alcohol may increase absorption and should be avoided.

5. Fire Fighting Measures

- Extinguishing Media** : Not a flammable liquid. Use foam, carbon dioxide or dry chemical. Use soft stream or water fog only if necessary.
- Specific Hazards Arising from the Chemical** : Emits the following hazardous combustion products: Carbon oxides (CO_x), Hydrogen chloride, Hydrogen fluoride.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Isolate fire area. Evacuate downwind.

6. Accidental Release Measures

- Personal Precautions** : Isolate and post spill area. Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, protective gloves, long-sleeved shirt and long pants, shoes plus socks. Wear a filtering mask for dust, splash, mist or spray exposures. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Dike to prevent runoff. Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds and sewer drains.
- Methods and Materials for Containment and Cleanup** : Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste.

7. Handling and Storage

- Precautions for Safe Handling** : Do not contaminate other pesticides, fertilizers, water, food or feed by storage, handling or disposal.



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Conditions for Safe Storage : Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/store only in original container.

8. Exposure Controls / Personal Protection

TLV/PEL : No TLV or PEL established for Bifenthrin or Imidacloprid.

Appropriate Engineering Controls : Apply technical measures to comply with occupational exposure limits. If working in confined spaces, ensure there is a supply of air suitable for breathing and wear the recommended equipment.

Personal Protective Equipment : Splashproof goggles or face shield, protective gloves, long-sleeved shirt and long pants, shoes plus socks. Wear a filtering mask for dust, splash, mist or spray exposures. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

Odor/Appearance : White to tan liquid

Flash Point, °F : >200 Degrees F.

Boiling Point, °F : No information found

Melting Point(Freezing point), °C : Not applicable

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

Vapor Density : No information found

Solubility in Water : Dispersible

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 °C : 1.074-1.094

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

Octanol/Water Partition Coefficient : No information found

pH : 7.0

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 : May emit carbon oxides, hydrogen chloride and hydrogen fluoride under fire conditions.

Hazardous Polymerization : Will not occur

Conditions to Avoid : Excessive heat and fire



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Incompatible Materials : Avoid strong bases, strong acids and strong oxidizing agents.

11. Toxicological Information

- Acute Toxicity (Oral LD50)** : >175 mg/kg (rat). Toxic if swallowed.
- Acute Toxicity (Dermal LD50)** : >5,000 mg/kg (rabbit). May be harmful in contact with skin.
- Acute Toxicity Inhalation LC50** : >2.32 mg/L/4 hours (rat). Harmful if inhaled.
- Likely Routes of Exposure** : Ingestion, inhalation, skin, eyes
- Skin Irritation** : Not classified as hazardous under 29 CFR 1910.1200 (2012).
- Eye Irritation** : Causes eye irritation.
- Skin Sensitization** : Non-sensitizing (Guinea pig)
- Carcinogenic** : Suspected of causing cancer. Bifenthrin=liver adenocarcinomas and benign bladder tumors (male mice).
- Chronic Effects** : Specific Target Organ Toxicity-Repeated Exposure: Causes damage to Central Nervous System, Thyroid, Liver through prolonged or repeated exposure.
- Other Hazards** : STOT-Single Exposure: Causes damage to Central Nervous System, Thyroid, Liver. Bifenthrin causes clinical signs of neurotoxicity (tremors, impaired gait, excessive salivation) following acute or subchronic exposure.

12. Ecological Information

- Ecotoxicity** : Very toxic to aquatic life with long lasting effects.
- Persistence and Degradability** : Bifenthrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable. Imidacloprid: Persistent in soil.
- Bioaccumulative Potential** : Bifenthrin: Has some potential to bioaccumulate in the environment.
- Mobility in Soil** : Bifenthrin: Immobile. Not expected to reach groundwater.
- Other Adverse Effects** : No information available.

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** : UN3352, Pyrethroid Pesticide, Liquid, Toxic, (Bifenthrin, Imidacloprid)
- Transport Hazard Class** : Toxic (6.1)
- UN Identification Number** : UN3352
- Packaging Group** : PG III
- Environmental Hazards** : Marine Pollutant only if shipped by Air (IATA) or Vessel (IMDG). Not listed as a Marine Pollutant per 49 CFR 172.101, Appendix B.



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Transport in Bulk : No additional shipping requirements for bulk shipments.
Special Precautions for Transportation : ERG # 151
Freight Classification : Pesticides, NOI, Insecticides, Poison

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 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 : 279-3459-5905

FIFRA Signal Word : Warning

FIFRA Label Statement : Keep out of reach of children.

FIFRA Label Statement : Restricted Use Pesticide - Toxic to fish and aquatic organisms.

FIFRA Label Statement : May be fatal if swallowed.

FIFRA Label Statement : Harmful if absorbed through skin.

FIFRA Label Statement : Harmful if inhaled.

FIFRA Label Statement : Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

FIFRA Label Statement : Avoid breathing spray mist or vapor.

16. Other Information

Data of Preparation/Revision : 23-November-2015