



Safety Data Sheet

Report Date 17-May-15

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1. Identification

Product Name : DEFCON 2.1G (EPA Reg No 5481-9030-5905)
Synonyms : None
Product Use : Tebupirimphos and Cyfluthrin 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 : Causes mild skin irritation.
Eye Irritation : Causes serious eye irritation.
Acute Toxicity Oral : Fatal if swallowed.
Acute Toxicity Dermal : Harmful in contact with skin.

Hazard Categories : Oral/Dermal/Inhalation Toxicity - 2/4/3; Skin Irritation - 3; Eye Irritation - 2A

Hazard Statement : Fatal if swallowed
Harmful in contact with skin
Causes serious eye irritation
Causes mild skin irritation
Toxic if inhaled

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Tebupirimphos Technical	96182-53-5	2.00
Cyfluthrin Technical	68359-37-5	0.1
Blend of inert ingredients including ammonia salts of carboxylic acid.	Proprietary	97.745

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 person to fresh air. If person is 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. Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth if unconscious.



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Indication of Immediate Medical Attention and Special Treatment Needed : Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered in conjunction with atropine. Do not give morphine. Observe for 24 to 48 hours.

5. Fire Fighting Measures

Extinguishing Media : Use water or dry chemical extinguishing agents.
Specific Hazards Arising from the Chemical : May produce toxic and irritating fumes under fire conditions.
Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective equipment. Keep out of smoke. Cool fire-exposed containers with water spray.

6. Accidental Release Measures

Personal Precautions : Keep unprotected and unnecessary personnel out of spill area. Wear protective clothing prior to handling.
Protective Equipment : Splashproof goggles or face shield, impervious gloves, long-sleeved shirt and long pants, and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
Emergency Procedures : Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Avoid dust formation. Do not allow to enter soil or waterways.
Methods and Materials for Containment and Cleanup : Sweep up or vacuum up spillage and collect in suitable containers for disposal. Clean contaminated floors and objects thoroughly.

7. Handling and Storage

Precautions for Safe Handling : Avoid exposure to dust and vapors by wearing appropriate personal protective equipment and adequate ventilation. Always wash hands, face, and arms with soap and water before smoking, eating, drinking, or going to the toilet.
Conditions for Safe Storage : Store in the original container in a secure, temperate, dry place. Keep away from heat and open flame. Do not contaminate water, food, or feed. Do not contaminate bodies of water. Recommended maximum transport/storage temperature is 100 degrees F.

8. Exposure Controls / Personal Protection

TLV/PEL : No TLV or PEL established.
Appropriate Engineering Controls : General and/or local exhaust should be sufficient.
Personal Protective Equipment : Splashproof goggles or face shield, impervious gloves, long-sleeved shirt and long pants, and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

Odor/Appearance : Tan/reddish granule; slight mercaptan-like odor.
Flash Point, °F : Non-combustible
Boiling Point, °F : Not applicable
Melting Point(Freezing point), °C : Not applicable
Vapor Pressure, mm Hg @ 20 °C : Not applicable
Vapor Density : Not applicable
Solubility in Water : Insoluble



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Molecular Formula : Not applicable, formulated mixture.
Density, g/mL @ 25 °C : 35-45 lbs/cu ft (density)
Evaporation Rate(Butyl Acetate = 1) : Not applicable
Octanol/Water Partition Coefficient : No information found
pH : 4.0 to 5.0 (1%)
Flammable Limits (approximate volume % in air) : Not applicable
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 produce toxic and irritating fumes under fire conditions.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid exposure to moisture, heat, flames and sparks. Stable under recommended storage conditions.
Incompatible Materials : Avoid strong oxidizing agents, strong bases and methanol.

11. Toxicological Information

Acute Toxicity (Oral LD50) : 190 mg/kg (male rat), 132 mg/kg (female rat). Fatal if swallowed.
Acute Toxicity (Dermal LD50) : >2,000 mg/kg (rabbit). Harmful in contact with skin.
Acute Toxicity Inhalation LC50 : 4.92 mg/L (male rat), 2.86 mg/L (female rat). Toxic if inhaled.
Likely Routes of Exposure : Ingestion, inhalation, skin and eyes.
Skin Irritation : Causes mild skin irritation.
Eye Irritation : Contact may cause moderate eye irritation.
Skin Sensitization : Not a skin sensitizer.
Carcinogenic : Not listed by IARC, NTP or OSHA.
Chronic Effects : Tebupirimphos caused cholinesterase inhibition in chronic studies in rats, mice and dogs. Cyfluthrin caused clinical signs of toxicity including neurological symptoms in chronic studies in rats and dogs.
Other Hazards : None currently known.

12. Ecological Information

Ecotoxicity : This product is toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
Persistence and Degradability : No information found
Bioaccumulative Potential : No information found
Mobility in Soil : No information found
Other Adverse Effects : Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

13. Disposal Considerations



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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 : Organophosphorus Pesticide, Solid, Toxic, (Tebupirimphos)
Transport Hazard Class : Toxic (6.1)
UN Identification Number : UN2783
Packaging Group : PG III
Environmental Hazards : No information found
Transport in Bulk : No information found
Special Precautions for Transportation : No information found.
Freight Classification : Pesticides, NOI, Insecticides, Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :

Health: 2 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: Y
Delayed (Chronic) Health: N
Sudden Release of Pressure: N
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 : 5481-9030-5905
FIFRA Signal Word : Danger
FIFRA Label Statement : Restricted Use Pesticide
FIFRA Label Statement : Keep out of reach of children.
FIFRA Label Statement : May be fatal if swallowed.
FIFRA Label Statement : Harmful if inhaled or absorbed through skin.
FIFRA Label Statement : Causes moderate eye irritation.
FIFRA Label Statement : Avoid breathing vapor or dust.
FIFRA Label Statement : Avoid contact with skin, eyes or clothing.

16. Other Information

Data of Preparation/Revision : 17-May-2015