



Safety Data Sheet

Report Date 12-Jun-15

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1. Identification

Product Name : SEED SHIELD CEREALS
Synonyms : None
Product Use : Seed Treatment
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 : Not classified due to skin irritation.
Eye Irritation : Minimally irritating (rabbit)
Acute Toxicity Oral : LD50 >5,000 mg/kg (rat)
Acute Toxicity Dermal : LD50 >5,000 mg/kg (rat)
Hazard Categories : Eye Irritation-2B; STOT Respiratory Irritation-3; STOT Single Exposure-2; Carcinogen-2
Hazard Statement : Causes eye irritation
May cause respiratory irritation
May cause damage to organs (or state all organs affected, if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
Suspected of causing cancer

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Difenoconazole	119446-68-3	3.45
Mefenoxam	70630-17-0 & 69516-34-3	0.86
Fludioxonil	131341-86-1	0.72
Thiamethoxam	153719-23-4	5.75



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Sedaxane

874967-67-6

1.44

87.78

Other ingredients, including Glycerin (CAS No. 56-81-5), Titanium Dioxide (CAS No. 13463-67-7), Propylene Glycol (CAS No. 57-55-6) and Talc (CAS No. 14807-96-6).

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.

Indication of Immediate Medical Attention and Special Treatment Needed : In the event of an adverse response, treatment should be directed toward control of the symptoms.

5. Fire Fighting Measures

Extinguishing Media : Use dry chemical, foam or carbon dioxide extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards Arising from the Chemical : During a fire, irritating and possibly toxic gases 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 to prevent human exposure to fire, smoke, fumes or products of combustion.

6. Accidental Release Measures

Personal Precautions : Keep unprotected and unnecessary personnel out of spill area.

Protective Equipment : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

Emergency Procedures : Control the spill at its source. Contain the spill to prevent spreading, contaminating soil or waterways, and from entering sewers or drains.

Methods and Materials for Containment and Cleanup : Cover entire spill area with absorbent material, collect and place in a compatible disposal container. Scrub area with hard water detergent. Pick up wash water with additional absorbent and place into compatible disposal container.

7. Handling and Storage



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- Precautions for Safe Handling** : Keep locked up and out of reach of children. Do not contaminate water, food or feed by storage, handling or disposal. Keep container tightly closed. Do not allow water to be introduced into the contents of the container.
- Conditions for Safe Storage** : Store in original container only. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

8. Exposure Controls / Personal Protection

- TLV/PEL** : Glycerin: 15 mg/m³ (PEL). Titanium Dioxide: 15 mg/m³ (PEL), 10 mg/m³ (TLV).
Talc: 20 mppcf (PEL), 2 mg/m³ (TLV).
- Appropriate Engineering Controls** : Use effective engineering controls to comply with occupational exposure limits.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

- Odor/Appearance** : Red liquid with aromatic odor.
- Flash Point, °F** : Not available
- Boiling Point, °F** : Not available
- Melting Point(Freezing point), °C** : Not available
- Vapor Pressure, mm Hg @ 20 °C** : Not determined
- Vapor Density** : Not available
- Solubility in Water** : Not available
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.076
- Evaporation Rate(Butyl Acetate = 1)** : Not available
- Octanol/Water Partition Coefficient** : Not available
- pH** : 6.7 (1% solution)
- Flammable Limits (approximate volume % in air)** : Not available
- Auto-ignition Temperature** : Not available
- Decomposition temperature** : Not available

10. Stability and Reactivity

- Reactivity** : Not reactive
- Chemical Stability** : Stable
- Hazardous Decomposition Products** : Not available



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Hazardous Polymerization : Will not occur
Conditions to Avoid : None known
Incompatible Materials : None known

11. Toxicological Information

Acute Toxicity (Oral LD50) : >5,000 mg/kg (rat). Not classified as hazardous.
Acute Toxicity (Dermal LD50) : >5,000 mg/kg (rat). Not classified as hazardous.
Acute Toxicity Inhalation LC50 : >2.59 mg/L/4 hours. May cause respiratory irritation (Single Target Organ T).
Likely Routes of Exposure : Eyes, inhalation
Skin Irritation : Slightly irritating. Not classified as hazardous.
Eye Irritation : Causes eye irritation.
Skin Sensitization : Not a sensitizer (Guinea pig).
Carcinogenic : Suspected of causing cancer (fludioxonil). Titanium dioxide (IARC 2B), Talc (IARC 3).
Chronic Effects : Specific Target Organ Toxicity: May cause damage to organs (respiratory system effects).
Other Hazards : Kidney and liver effects at high doses (difenoconazole, fludioxonil).

12. Ecological Information

Ecotoxicity : For the active ingredients: Fish (rainbow trout) LC50 = 0.47 ppm to >113 ppm. Invertebrate (water flea) Daphnia Magna EC50 = 0.77 mg/L to >113 ppm. Bird (Bobwhite Quail) = 981 mg/kg to >2,000 mg/kg.
Persistence and Degradability : Difenoconazole: stable in soil and water. Fludioxonil: persistent in soil, stable in water. Mefenoxam: not persistent in soil or water. Sedaxane: not persistent in soil. Thiamethoxam: not persistent in soil, stable in water.
Bioaccumulative Potential : Fludioxonil: does not bioaccumulate. Mefenoxam: does not bioaccumulate.
Mobility in Soil : Difenoconazole: Low to moderate. Fludioxonil: Moderate. Mefenoxam: Moderate. Thiamethoxam: Moderate.
Other Adverse Effects : No 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.
Transport Hazard Class : None



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UN Identification Number : None
Packaging Group : None
Environmental Hazards : Marine Pollutant under GHS standards. Not a listed on Appendix B to 49 CFR 172.101.
Transport in Bulk : No information found
Special Precautions for Transportation : If shipped by air (IATA) or water (IMDG), ship as UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Thiamethoxam, Fludioxonil), 9, PG III, Marine Pollutant
Freight Classification : Pesticides, NOI, Insecticides or Fungicides, 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: N
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 : 100-1527-5905

FIFRA Signal Word : Caution

FIFRA Label Statement : Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

FIFRA Label Statement : Remove clothing/PPE immediately if pesticides get inside.

FIFRA Label Statement : Then wash thoroughly and put on clean clothing.

FIFRA Label Statement : Remove PPE immediately after handling this product.

FIFRA Label Statement : Wash the outside of gloves before removing.

FIFRA Label Statement : As soon as possible, wash thoroughly and change into clean clothing.

FIFRA Label Statement : No additional label statements.

16. Other Information

Data of Preparation/Revision : 12-June-2015