



Safety Data Sheet

Report Date 06-Apr-16

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1. Identification

Product Name : AVARIS (EPA REG. NO. 100-1178-5905)
Synonyms : None
Product Use : Azoxystrobin and Propiconazole Fungicide
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 : Moderately irritating (rabbit)
Eye Irritation : Severely irritating (rabbit)
Acute Toxicity Oral : LD50 1,750 mg/kg (female rat)
Acute Toxicity Dermal : LD50 >5,000 mg/kg

Hazard Categories : Oral/Inhalation Toxicity-4/3; Eye/Skin Irritation-2A/2; STOT-SE: 3 (Resp Irr)/3 (Narcotic Effects)

Hazard Statement : Harmful if swallowed
Causes serious eye irritation
Causes skin irritation
May cause respiratory irritation
May cause drowsiness or dizziness

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Azoxystrobin	131860-33-8	7.00
Propiconazole	60207-90-1	11.70
Inert ingredients, including a blend of formulation aids (including propylene glycol, CAS No. 57-55-6).	Proprietary	81.30

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.



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5. Fire Fighting Measures

- Extinguishing Media** : Use dry chemical, foam or carbon dioxide extinguishing media. If water is used, 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 self-contained breathing apparatus and full protective clothing. 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** : Contain spill to prevent spreading or contaminating soil or from entering sewer and drainage systems or any body of water. Clean up spills immediately.
- Methods and Materials for Containment and Cleanup** : Cover entire spill with absorbent material and place in compatible disposal container. Wash area with hard water detergent (e.g., Tide, Joy or Spic and Span). Pick up wash liquid with additional absorbent and place in compatible disposal container.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children and domestic animals. Prevent eating, drinking, tobacco use and cosmetic application in areas where there is potential for exposure to the material. Wash thoroughly with soap and water after handling.
- Conditions for Safe Storage** : Store in a well-ventilated, secure area. Keep locked up.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No PEL or TLV established for mixture or ingredients.
- Appropriate Engineering Controls** : Use effective engineering controls to comply with occupational exposure limits, if applicable.
- 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** : Opaque yellow liquid with xylene odor.
- Flash Point, °F** : >212 Degrees F.
- Boiling Point, °F** : Not available
- Melting Point(Freezing point), °C** : Not applicable
- Vapor Pressure, mm Hg @ 20 °C** : Not established for mixture
- Vapor Density** : Not determined
- Solubility in Water** : Not determined
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.033
- Evaporation Rate(Butyl Acetate = 1)** : Not determined



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Octanol/Water Partition Coefficient : Not available
pH : 6.6 (1% solution in water @ 77 Degrees F.)
Flammable Limits (approximate volume % in air) : Not applicable
Auto-ignition Temperature : 824 Degrees F.
Decomposition temperature : Not available

10. Stability and Reactivity

Reactivity : Not reactive
Chemical Stability : Stable
Hazardous Decomposition Products : None known
Hazardous Polymerization : Will not occur
Conditions to Avoid : None known
Incompatible Materials : None known

11. Toxicological Information

Acute Toxicity (Oral LD50) : 1,750 mg/kg (female rat). Harmful if swallowed.
Acute Toxicity (Dermal LD50) : >5,000 mg/kg (rabbit). Not classified as hazardous under 29 CFR 1910.1200 (2012).
Acute Toxicity Inhalation LC50 : 2.55 mg/L/4 hours (female rat). Not classified as hazardous under 29 CFR 1910.1200 (2012).
Likely Routes of Exposure : Skin, inhalation
Skin Irritation : Moderately irritation (rabbit). Causes skin irritation.
Eye Irritation : Severely irritating (rabbit). Causes serious eye irritation.
Skin Sensitization : Not a sensitizer (Guinea pig)
Carcinogenic : Not listed by IARC, NTP or OSHA.
Chronic Effects : Propiconazole: Caused increased incidence of liver tumors at extremely high doses in male mice. Propylene glycol: Reported to cause central nervous system depression, headache and nausea. Chronic dietary exposure caused kidney/liver injury in lab animals.
Other Hazards : Specific Target Organ Toxicity-Single Exposure: May cause respiratory irritation. May cause drowsiness or dizziness.

12. Ecological Information

Ecotoxicity : Azoxystrobin/Propiconazole: fish 96-hour LC50 470 ppb/0.83 ppm; Green algae 5-day EC50 106 ppb/0.72 ppm; Invertebrate 48-hour EC50 259 ppb/3.2 ppm; Bird 14-day LD50 >250 mg/kg/2,510 mg/kg.
Persistence and Degradability : Azoxystrobin and Propiconazole = not persistent in soil
Bioaccumulative Potential : Azoxystrobin and Propiconazole = low bioaccumulation potential
Mobility in Soil : Azoxystrobin=moderate mobility in soil; Propiconazole=low mobility in soil
Other Adverse Effects : For the active ingredients, azoxystrobin and propiconazole, both sink 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.



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14. Transport Information

UN Proper Shipping Name : Not regulated by DOT. Regulated for any shipments by air (IATA) or water (IMDG).
Transport Hazard Class : None
UN Identification Number : None
Packaging Group : None
Environmental Hazards : Marine Pollutant under GHS criteria.
Transport in Bulk : Not regulated by DOT.
Special Precautions for Transportation : If shipped by air (IATA) or IMDG) in any size package, ship as: UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Azoxystrobin, Propiconazole), 9, PG III, Marine Pollutant
Freight Classification : Pesticides, NOI, Fungicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70) "Non-DOT Regulated"

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 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 : 100-1178-5905

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 appropriate protective eyewear such as goggles, face shield or safety glasses.

FIFRA Label Statement : Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum,

FIFRA Label Statement : using tobacco or the toilet. Remove and wash contaminated clothing before reuse.

16. Other Information

Data of Preparation/Revision : 06-April-2016