

MATERIAL SAFETY DATA SHEET

Shar-Shield PPZ

MSDS DATE: 1/25/2010
Rev. 3/8/2010

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Shar-Shield PPZ
SYNONYMS: Shar-Guard; Sharda Propiconazole 41.8 EC
EPA REGISTRATION NO.: 83529-22

MANUFACTURER: Sharda USA LLC
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Hockessin, DE 19707

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WEBSITE: www.shardaintl.com

EMERGENCY PHONE: 1(800) 222-1222
CHEMTREC PHONE: 1(800) 424-9300

CHEMICAL NAME: Propiconazole
CHEMICAL FAMILY: triazole
CHEMICAL FORMULA: C₁₅H₁₇Cl₂N₃O₂

PRODUCT USE: For use as a fungicide.
PREPARED BY: Sharda USA LLC

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Propiconazole

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
60207-90-1	41.8	41.8	yes
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:	N/A	N/A	
OSHA PEL STEL :	N/A	N/A	
OSHA PEL CEILING:	N/A	N/A	
ACGIH TLV-TWA:	N/A	N/A	
ACGIH TLV STEL:	N/A	N/A	
ACGIH TLV CEILING:	N/A	N/A	

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING. Causes substantial, but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear. Avoid contact with skin. Harmful if swallowed. Causes skin irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

ROUTES OF ENTRY: Ingestion, Dermal, Absorption, Inhalation

POTENTIAL HEALTH EFFECTS

EYES: Moderate irritant

SKIN: Moderate irritant

INGESTION: Slight toxicity

INHALATION: Slight toxicity

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ACUTE HEALTH HAZARDS: This product is slightly hazardous (WHO Hazard Class III)

CHRONIC HEALTH HAZARDS: Propiconazole technical has been extensively tested on laboratory mammals and in test-tube systems. Chronic administration of large doses of Propiconazole technical was associated with an increased liver tumor incidence in mice but not in rats. This proved to be related to a promotive effect of Propiconazole technical on proliferative changes genetically pre-existing in mice and therefore has no relevance to humans. No evidence of mutagenic, teratogenic or reproductive effects was obtained.

SECTION 4: FIRST AID MEASURES

FIRST AID	
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatments advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person
If on skin:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • 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 treatment advice.
HOT LINE NUMBER	
Have a product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222. For chemical emergency assistance (spill, leak, fire, or accident) call ChemTrec at 1-800-424-9300.	

SECTION 5: FIRE-FIGHTING MEASURES

This product is non-flammable and non-explosive. Product is combustible.

FLAMMABLE LIMITS IN AIR, UPPER: N/D
(% BY VOLUME) **LOWER:** N/D

FLASH POINT:
F: 164

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, or water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemicals are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run off. Wear self-contained breathing apparatus and full fire fighting turn-out gear (Bunker gear).

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce toxic carbon and nitrogen oxides, and hydrogen chloride.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Clean up spills immediately. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

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SECTION 6 NOTES:

Small Spill: Absorb small spills with sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal. Scrub area with hard water detergent. Pick up wash liquid with additional absorbent and place into appropriate container for disposal.

Large Spill: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify and scrape up for disposal. Pick up wash liquid with additional absorbent and place in a disposable container. After removal, flush contaminated area thoroughly with water. This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Handle and open container in a manner to prevent spillage. Do not get on skin or in eyes. Do not eat, drink or smoke during work; wash hands and face thoroughly before doing so. Immediately wash off accidental splashes from skin, clothing and out of eyes.

OTHER PRECAUTIONS: Do not contaminate water, food, or feed by storage or disposal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category G on EPA chemical-resistance category selection chart.

All handlers must wear:

- Protective eyewear

In addition, all handlers (mixers, loaders, and applicators, or individuals performing one or more of these tasks), who are applying this pesticide using hand-held equipment must wear:

- Long-sleeved shirt and long pants,
- Shoes and socks,
- Chemical-resistant gloves such as barrier laminate or Viton, and
- Protective eyewear (goggles, face shield, or safety glasses).

All handlers using propiconazole as a seed piece treatment must wear:

- Chemical-resistant gloves such as barrier laminate or Viton,
- Chemical-resistant apron, and
- Protective eyewear (goggles, face shield, or safety glasses).

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS: Refer to product label.

EXPOSURE GUIDELINES: Refer to Section 2.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: amber

ODOR: mild hydrocarbon

PHYSICAL STATE: liquid

pH AS SUPPLIED: 3.76

SPECIFIC GRAVITY (H₂O = 1): 1.085 @ 22 deg C

VISCOSITY: 21.4 centipose at 22 deg C

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SECTION 10: STABILITY AND REACTIVITY

STABLE
X

UNSTABLE

STABILITY: Stable at normal temperature and pressure.

CONDITIONS TO AVOID (STABILITY): N/A

INCOMPATIBILITY (MATERIAL TO AVOID): N/A

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition may produce toxic carbon and nitrogen oxides, and hydrogen chloride.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): Avoid temperatures above 150 deg F and below 20 deg F. Avoid contact with oxidizing alkaline and acidic conditions and materials.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (Propiconazole Technical):

Oral LD ₅₀ (rat)	>3,000 mg/Kg
Dermal LD ₅₀ (rat)	>2,000 mg/Kg
Inhalation LC ₅₀ (rat)	>2.0 mg/L (4-hr)

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: This product is toxic to fish and shrimp. Do not apply directly to water, or to areas where surface water is present, or to inter-tidal areas below mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Product disposal – Pesticide wastes may be acutely hazardous. Improper disposal is a violation of federal law. Pesticide, mixtures, or equipment rinse water that cannot be chemically reprocessed must be disposed of according to applicable federal, state or local regulations. Contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

Container disposal – Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

RCRA HAZARD CLASS: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION – Not Regulated

WATER TRANSPORTATION

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid, N.O.S.

HAZARD CLASS: 9

ID NUMBER: UN No. 3082

PACKING GROUP: III

LABEL STATEMENTS: Propiconazole 41.8%, Marine Pollutant

SECTION 15: REGULATORY INFORMATION

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U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): The ingredients of this product are listed on the TSCA inventory or are exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not applicable

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT) 302:Not applicable

311/312 HAZARD CATEGORIES: Acute health hazard (immediate)
Delayed health hazard (chronic)

313 REPORTABLE INGREDIENTS: Propiconazole CAS# 60207-90-1

CA PROPOSITION 65: Not applicable

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

HAZARD RATINGS	NFPA		
HEALTH:	2	0	MINIMAL
FLAMMABILITY:	1	1	SLIGHT
REACTIVITY:	0	2	MODERATE
		3	HIGH
		4	SEVERE

PREPARATION INFORMATION: MSDS DATE 1-25-2010
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DISCLAIMER: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. The information contained herein is given in good faith and is believed to be correct, but no warrant, express or implied is made. Consult Sharda USA LLC for further information.