

FarmSaver.com

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Chemtrec (24 Hours): (800) 424-9300

"For Chemical Emergency"

Spill, Leak, Fire, Exposure or Accident, Call:

Chemtrec (24 Hours): (800) 424-9300

Outside U.S., call collect: (703) 527-3887

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME: Armor Tech PPZ 143 (Fungicide)	CHEMICAL NAME (FORMULA): 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxalan-2-yl]methyl]-1H-1,2,4-triazole
CHEMICAL CLASS: Triazole derivative fungicide	

SECTION 2 - HAZARDOUS INGREDIENT INFORMATION

Section 313 of Sara Title III: Ingredients subject to reporting are identified by asterisk (*)

CAS NO.	COMPONENT	%	ACGIH TLV	OSHA PEL	OTHER
60207-90-1	Propiconazole*	14.3	N/D	N/D	N/D

SECTION 3 - PHYSICAL PROPERTIES

BOILING POINT: 330.8°F (166°C)	MELTING POINT: N/A	SPECIFIC GRAVITY: 1.082	VAPOR PRESSURE (PROPICONAZOLE) 4.2 X 10⁻⁷ mmHg @ 25°C
VAPOR DENSITY (AIR=1): N/D	% SOLUBILITY IN WATER: Miscible	% VOLATILE BY WEIGHT: N/D	
APPEARANCE: Clear amber liquid	ODOR: Slight solvent odor	pH: 5.6 – 6.0	

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT & METHOD: 165°F (92°C) TCC	FLAMMABLE LIMITS IN AIR (LFL - UFL): N/D
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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 chemical 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).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Can burn and release irritating and toxic gases due to thermal decomposition or combustion.

SECTION 5 - REACTIVITY DATA

STABILITY: **Stable. May decompose if heated.**

HAZARDOUS POLYMERIZATION: **Will not occur.**

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

CONDITIONS & MATERIALS TO AVOID: **Avoid temperatures above 150°F and below 20°F. Avoid contact with oxidizing alkaline and acidic conditions and materials.**

SECTION 6 - PROTECTIVE EQUIPMENT & EXPOSURE CONTROL METHODS

RESPIRATORY PROTECTION: **Not required.**

VENTILATION	LOCAL EXHAUST: ADEQUATE	MECHANICAL: ACCEPTABLE	SPECIAL: NONE	OTHER: NONE
PROTECTIVE GLOVES AND BOOTS: Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton.		EYE PROTECTION: Protective eyewear (e.g., goggles or full-face shield)		

PRODUCT NAME: Armor Tech PPZ 143 (Fungicide)**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:****Coveralls, long-sleeved shirt, long pants, shoes plus socks.****WORK/HYGIENIC PRACTICES:**

Do not get in eyes or on clothing. Avoid contact with skin or clothing. Avoid breathing vapor or spray mist.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them. Follow manufacturer's instructions for cleaning maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

SECTION 7 - HEALTH HAZARDS**PRIMARY ROUTES OF ENTRY:****Eyes, skin, ingestion, and inhalation.****CARCINOGEN:****Not listed by OSHA or IARC.****NTP:****Not listed.****MUTAGENICITY:****No evidence of effects during *in vivo* or *in vitro* studies.****TERATOLOGY (BIRTH DEFECTS):****None observed.****EYE CONTACT:****Causes substantial but temporary eye injury. Do not get in eyes.****SKIN CONTACT:****Slightly irritating. Harmful if absorbed through skin. Avoid contact with skin or clothing.****INGESTION:****Harmful if swallowed.****INHALATION:****Slightly irritating to respiratory tract. Harmful if inhaled. Avoid breathing vapor or spray mist.****ALLERGIC SKIN REACTIONS (Dilute Mix):****Not a skin sensitizer.****SECTION 8 - EMERGENCY & FIRST AID PROCEDURES****EYE CONTACT:****Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.****SKIN CONTACT:****Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor.****INGESTION:****Immediately call a poison control center or a doctor. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.****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.****NOTES TO PHYSICIAN:****There is no specific antidote for this product. Induce emesis or lavage stomach, taking care to avoid aspiration of stomach contents into lungs.****SECTION 9 - SPILL, LEAK & DISPOSAL INFORMATION****STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:****Clean up spills immediately. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.****Small Spill: Absorb small spills or sand, vermiculate or other inert absorbent. Place contaminated material in 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.****WASTE DISPOSAL METHOD:****Do not contaminate food, feed, or water by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess waste, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.**

PRODUCT NAME: Armor Tech PPZ 143 (Fungicide)

SECTION 10 – ECOLOGICAL INFORMATION

SUMMARY OF EFFECTS:

This pesticide is toxic to fish. DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. DO NOT contaminate water when disposing of equipment wash water.

FISH TOXICITY (Technical):

96 hour LC₅₀, Rainbow Trout

96 hour LC₅₀, Bluegill

4.3 ppm

>5.7 ppm

INVERTEBRATE (Technical):

48 hour EC₅₀, *Daphnia magna*

>3.2 ppm

MOVEMENT & PARTITIONING:

In Soil:

In Water:

Bioaccumulation Potential:

Low mobility in soil. Not persistent in soil.

Stable in water.

Low.

SECTION 11 - SHIPPING DATA

DOT PROPER SHIPPING NAME:

Not regulated.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health; 2

Flammability: 1

Reactivity: 0

Additional Labeling: None

SECTION 12 - SPECIAL INSTRUCTIONS

SPECIAL INSTRUCTIONS:

Use only in a well-ventilated area. Do not store this material near food, feed, or drinking water. Do not store above 150°F (66°C) or below 20°F. Do not reuse this container.

SECTION 13 - OTHER INFORMATION/PRECAUTIONS

TSCA STATUS:

None

SARA TITLE 3: SECTION 311/312 CATEGORIZATIONS (40CFR 370):

Acute health hazard. Chronic health hazard.

SARA TITLE 3: SECTION 313 INFORMATION (40CFR 372):

Propiconazole (CAS No. 60207-90-1)

CALIFORNIA PROPOSITION 65:

This product does not contain any substances known to the State of California to cause cancer or reproductive harm.

COMMON ABBREVIATIONS THAT MAY HAVE BEEN USED: N/A = NOT APPLICABLE NA = NOT AVAILABLE N/D = NOT DETERMINED

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DATE: 12/12/05 (SH3)