SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: EMERGENCY TELEPHONE NUMBERS:

United Turf Alliance LLC For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident

8014 Cumming Highway Call CHEMTREC Day or Night

• Within USA and Canada: 1-800-424-9300 CCN771

• Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

PRODUCT NAME : ArmorTech PPZ 143 MC

CHEMICAL NAME : Propiconazole PRODUCT USE : Fungicide

PRODUCT CODE : EPA Reg. No 86064-4

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

Yellow clear liquid

HEALTH HAZARDS: Harmful if swallowed or inhaled. Eye irritant. Possible skin sensitizer.

PHYSICAL HAZARDS: May release toxic

fumes if burned.

ENVIRONMENTAL HAZARDS:

propiconazole is toxic to aquatic life.



SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	
Propiconazole	14.3	60207-90-1	
Other components	85.7	N/A	

SECTION 4 - FIRST AID MEASURES

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: 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: 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. **IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 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.

NOTE TO PHYSICIAN: Contains xylene-range aromatic solvent. Vomiting may cause aspiration pneumonia. If ingested, lavage stomach to avoid aspiration. A slurry of activated charcoal in water can be left in the stomach. Give a saline laxative and supportive therapy.

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

National Fire Protection Rating (NFPA)

HEALTH			1			
FLAMMABIL	JITY		1			
REACTIVITY		0				
4=Severe	3=Serious	2=Moderate		1=Slight	0=Minimal	

FLASHPOINT: >100°C

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIRE AND EXPLOSION HAZARD: Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Dike and collect water used to fight fire to prevent environmental damage due to run off.

Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece.

<u>SECTION 6 - ACCIDENTAL RELEASE MEASURES</u>

IN CASE OF SPILLS OR LEAKS: Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Absorb small spills on sand, vermiculite 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. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container

Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

HANDLING: Use only in a well-ventilated area. Wear appropriate safety equipment when handling.

STORAGE: Store in original container with lid tightly closed. Keep away from food, feed and drinking water. Store in a well ventilated, dry place away from heat and other sources of ignition.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm):

COMPONENT	OSHA PEL	ACIGH TLV	
Propiconazole	Not listed	Not listed	

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to minimize exposure to airborne contaminants. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION - Safety glasses or goggles. CLOTHING - Long-sleeved shirt and long pants, Shoes plus socks.

GLOVES - Chemical-resistant gloves

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.

USER SAFETY RECOMMENDATIONS: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow clear liquid

Odor: Faint odor
pH: 6.8 – 7.8

Melting Point: Not applicable
Boiling Point: No data
Flash Point: >100°C

Evaporation Rate: No data

Evaporation Rate: No data
Flammability: No data
Flammability Limits: No data

Vapor Pressure: 5.6 x 10⁻² mPa (25°C) (Propiconazole)

Vapor Density: Not applicable

Density: 1.07 – 1.11 g/ml (8.93 – 9.26 lb/gl)*

Solubility: Emulsifies

Partition Coefficient: $log P = 3.72 (pH 6.6, 25^{\circ}C) (Propiconazole)$

Auto-Ignition Temperature: No data **Decomposition Temperature:** No data

Viscosity: 164.9 cSt (20°C), 60.2 cSt (40°C)

^{*}Listed density is an approximate value and does not necessarily represent that of a specific batch.

SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY:

CHEMICAL STABILITY: Stable, however may decompose if heated.

HAZARDOUS REACTION/POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid temperatures above (125°F, 48°C)

INCOMPATIBLE MATERIALS: Acidic and oxidizing materials

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, Oxides of nitrogen

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD_{50} (rat) No data Dermal LD_{50} (rat) No data Inhalation LC_{50} (rat) No data Eye Irritation (rabbit) No data Skin Irritation (rabbit) No data Sensitization (guinea pig) No data

CARCINOGEN STATUS:

OSHA - Not listed
NTP - Not listed
IARC - Not listed

TERATOGENICITY: Effects only noted at maternally toxic doses.

MUTAGENICITY: Weight of evidence indicates that propiconazole is non-mutagenic

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This pesticide is toxic to fish and shrimp. 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 cleaning equipment or disposing of equipment wash waters.

FATE: Propiconazole is moderately persistent with a soil half-life of 30-365 days depending on soil type and weather conditions. Propiconazole binds to soil and is immobile in most soil types.

FISH TOXICITY: (technical)

96 hour LC_{50} , Rainbow trout – 0.8 ppm 96 hour LC_{50} , Bluegill – 1.3 ppm

AVIAN TOXICITY: (technical)

Dietary LC₅₀, Bobwhite quail - > 5,000 ppm Dietary LD₅₀, Mallard duck - > 5,000 ppm

BEE TOXICITY: (technical) > 25 ug/bee

SECTION 13 - DISPOSAL CONSIDERATIONS

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

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsates into application equipment or mix tank or store rinsates for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refer to the product label for additional and complete Container Handling instructions

SECTION 14 - TRANSPORT INFORMATION

SHIPPING DESCRIPTION:

(Ground transport) Not regulated by DOT

(Marine transport) UN3082, Environmentally Hazardous Substance, Liquid, N.O.S., 9,

III, Marine Pollutant (propiconazole)

TRANSPORT HAZARD CLASS: N/A
UN NUMBER: N/A
DOT PACKING GROUP: PG III

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: Not listed

SARA TITLE III STATUS:

311/312 Hazard Categories – Immediate, Fire 313 Toxic Chemicals – Propiconazole

CALIFORNIA PROP 65: Propiconazole not listed

TSCA: This product is exempted from TSCA because it is solely for

FIFRA regulated use.

SECTION 16 - OTHER INFORMATION

HMIS HAZARD RATINGS	HEALTH				1	
	FLAMMABIL	_ITY			1	
	PHYSICAL I	HAZARD			0	
	4=Severe	3=Serious	2=Mc	oderate	1=Slight	0=Minimal

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

REVISED DATE: February, 2015

REFERENCE: Revised for GHS compliance