



AOWEI AGRICULTURAL TECHNOLOGY CO., LTD.

ADD: NO. 27, CBD BUSINESS INNER RING ROAD, ZHENGDONG NEW DISTRICT,
ZHENGZHOU, CHINA

TEL: 86-371-63229216 - FAX: 86-371-63229216

Website: www.aoweichem.com Email: admin@aoweichem.com

Material Safety Data Sheet (Uniconazole 5%WP)

Section 1 - Chemical Product and Company Identification

Product name: Uniconazole 5%WP

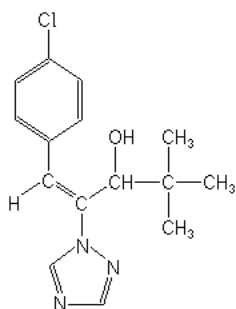
Chemical name of active ingredient(s):

E)-1-p-chlorophenyl-2-(1,2,4-triazole-1-yl)-4, 4-dimethyl-1-pentenyl-3-ol

Chemical formula: C₁₅H₁₈ClN₃O

Molecular Weight: 291.8

Structural Formula:



Form: White powder

Color: White

Odor: with slight sulfur odor

CAS No.: 83657-22-1

Company Identification:

COMPANY NAME: YANCHENG LIMIN CHEMICAL CO.,LTD.

ADD: LONGGANG, YANCHENG, JIANGSU, CHINA

[HTTP://WWW.CHINAPESTICIDES.COM](http://WWW.CHINAPESTICIDES.COM)

TEL:86-515-88366436 FAX:86-515-88356231

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
83657-22-1	UNICONAZOLE	5
	Others	95



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Section 3 - Hazards Identification

EMERGENCY OVERVIEW

CAUTION: CAUSES EYE IRRITATION

AVOID CONTACT WITH EYES, SKIN AND CLOTHING

KEEP OUT OF REACH OF CHILDREN

Acute Toxicity (Primary Routes of Exposure)

Eye: This product is expected to cause brief and/or minor eye irritation. The degree of injury will depend on the amount and duration of contact and the speed and thoroughness of the first aid treatment. The expected adverse health effects resulting from an exposure may include redness and possible swelling.

Skin: This product is expected to cause brief and/or minor irritation. The degree of injury will depend on the amount and duration of contact and the speed and thoroughness of the first aid treatment. The expected adverse health effects resulting from an exposure may include redness and possibly some minor swelling.

This product is not expected to cause allergic skin reactions.

This product has been shown to be minimally toxic when absorbed through the skin. The degree of injury will depend on the amount of material inhaled and the speed and thoroughness of the first aid treatment.

Ingestion: This product has been shown to be minimally toxic when ingested. The degree of injury will depend on the amount of material ingested and the speed and thoroughness of the first aid treatment.

Inhalation: This product has been shown to be minimally toxic when inhaled. The degree of injury will depend on the amount of material inhaled and the speed and thoroughness of the first aid treatment.

Chronic toxicity (Including cancer): See section 11

Teratology (Birth defects) information: See section 11

Reproduction information: See Section 11

Potentially Aggravated Condition: Individuals with preexisting diseases of the liver or kidney may have increased susceptibility to the toxicity of excessive exposures.

For complete discussion of the toxicology data from which this evaluation was made, refer to Section 11. For Regulatory information, refer to Section 15.

Section 4 - First Aid Measures

Eyes: Flush eyes immediately with plenty of water while holding eyelids open. Remove contact lenses if worn. If irritation persists, see a doctor.

Cyclohexanone Wash with soap and water. Remove and wash contaminated clothing separately. Get medical attention if irritation persists.

Ingestion: If swallowed, drink 1 or 2 glasses of water (or milk) and induce vomiting by



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touching the back of the throat with finger. If possible, contact a physician or Poison Control Center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Take person and product container to the nearest emergency treatment center.

Inhalation: If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Notes to Physician: None

Section 5 - Fire Fighting Measures

FLASH POINT: NA

METHOD: NA

AUTOIGNITION: NA

EXTINGUISHING MEDIA: CO₂, dry chemical, foam, water fog.

FLAMMABLE LIMITS (% by volume in air): Lower: NA Upper: NA

NFPA RATINGS: Health 1; Flammability 0; Special None

(Least – 0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National fire protection association. NFPA.

FIRE FIGHTING INSTRUCTIONS: Products of combustion from fires involving this product may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of nitrogen. Combustion may produce toxic compound of chlorine. Incomplete combustion can produce carbon monoxide.

Section 6 - Accidental Release Measures

CONTAINMENT: Avoid runoff into storm sewers and ditches which lead to waterways.

Contain spilled liquids with dry sorbents.

CLEANUP: Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

CONTAINMENT: This material is water soluble. Stop or reduce contamination of any water. Isolate contaminated water.

CLEANUP: Remove contaminated water for treatment or disposal.



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Section 7 - Handling and Storage

Handling: Keep out of reach of children. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles and contaminated clothing. Keep product away from ignition sources.

Storage: Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

Section 8 - Exposure Controls, Personal Protection

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

EYE PROTECTION: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

RESPIRATION/VENTILATION: If operating conditions result in airborne concentrations of this material, the use of an approved respirator is recommended. Use adequate ventilation to keep the airborne concentration of this material below the recommended exposure standards.

SKIN PROTECTION: Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves.

Section 9 - Physical and Chemical Properties

Appearance: White powder

Suspension(w/w):70%min;

PH:7-11;

Wetting time, S:60max;

Water(w/w):3.0%max;

Fineness(through 44 um sieve):95%min

Section 10 - Stability and Reactivity

CHEMICAL STABILITY: Stable. Do not store at temperatures below 32°F

INCOMPATIBILITY: NDA

HAZARDOUS DECOMPOSITION PRODUCTS: NDA

OXIDATION/REDUCTION PROPERTIES: NDA

Section 11 - Toxicological Information



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Oral LD₅₀ (Rat) > 2020 mg/kg.

Skin LD₅₀ (Rabbit) > 2,000 mg/kg.

TOXICITY OF UNICONAZOLE TECHNICAL

CHRONIC/CARCINOGENICITY: A cancer bioassay in mice revealed an increased incidence of liver tumors among males exposed to 210 mg/kg/day Uniconazole via the diet. There was no increase in tumors of any type in males exposed to 1-25 mg/kg/day or in any of the treated female groups (1.5-240 mg/kg/day). The biological significance of this finding is unclear because the tumors arose late in the study and fewer untreated animals were still alive at that time. Uniconazole was not carcinogenic in rats exposed to 0.4-40 mg/kg/day in the diet for a lifetime.

The only toxic effects observed in rats were decreased body weight gains and changes in the blood chemistry and liver cell.

Repeated oral or dermal exposure to Uniconazole resulted in non-specific depression of the central nervous system and changes in the liver, kidney, and blood systems in rats, mice, and dogs at dose levels greater than 15, 140 and 20 mg/kg/day for the three species, respectively. The most prominent effects were produced in the liver. A chronic toxicity study in dogs revealed blood chemistry changes, increased liver, kidney, and adrenal weights, and decreased thymus weights at levels of 20-200 mg/kg/day. The only cellular effect observed was liver cell enlargement.

TERATOLOGY/DEVELOPMENTAL TOXICITY: In teratology studies, minor skeletal variations were observed in the offspring of rats exposed to 25 mg/kg/day Uniconazole, while no evidence of developmental toxicity or teratogenicity was seen in rabbits.

REPRODUCTION: Genetic toxicity tests in cultured mammalian cells and in mice indicate that Uniconazole may damage genetic material, but only at dose levels that are severely toxic to the test organisms. Uniconazole was not mutagenic in bacteria.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 3. For information regarding regulations pertaining to this product, refer to Section 15.

Section 12 - Ecological Information

AVIAN TOXICITY : The following tests were conducted with uniconazole technical

Oral LD₅₀ mallard duck: Greater than 2315 mg/kg

Oral LD₅₀ bobwhite quail: 1461 mg/kg

Dietary LC₅₀ mallard duck: 3345 ppm

Dietary LC₅₀ bobwhite quail: Greater than 5782 ppm

One generation reproduction study bobwhite quail: NOEC=320 ppm

One generation reproduction study mallard duck: NOEC= 80 ppm, Treatment related effects observed at 320 ppm

AQUATIC ORGANISM TOXICITY: The following tests were conducted with uniconazole technical:



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96-hr LC₅₀ rainbow trout : 14.8 mg/l

96-hr LC₅₀ bluegill sunfish: 8.2mg/l

96-hr LC₅₀ carp: 7.5mg/l

48-hr EC₅₀ Daphnia magna: Greater than 10 mg/l

OTHER NON-TARGET ORGANISM TOXICITY: The acute contact LD₅₀ of uniconazole technical in the honey bee is greater than 20 µg/bee

Section 13 - Disposal Considerations

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

DISPOSAL METHODS: Check governmental regulations and local authorities for approved disposal of this material. Dispose in accordance with applicable laws and regulations.

Section 14 - Transport Information

Non-hazardous goods

Section 15 - Regulatory Information

Active Ingredient Name : Uniconazole

The following precautions appear in the Precautions section of label / leaflet. Wash hands and exposed skin after use. Wash splashes from skin or eyes immediately with plenty of water. The following precautions appear in the "Statutory conditions relating to use" box of the label / leaflet. For use only as insecticide, and professional use only. Wear suitable protective clothing / overall and synthetic rubber / PVC gloves and eye protections when using.

Contains: 5% Uniconazole

Section 16 - Additional Information

Recommended use: Plant growth regulators

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.