

浙江宇龙药业有限公司

ZHEJIANG UDRAGON PESTICIDES AND CHEMICALS CO.,LTD.

NO.172, ZHANGJIADUN ROAD, TANGXI TOWN, LINPING DISTRICT,
HANGZHOU, ZHEJIANG, CHINA

MATERIAL SAFETY DATA SHEET

PENCONAZOLE 200 g/L EW

1. IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	Penconazole 200 g/L EW
USE CATALOGUE	:FUNGICIDE
COMPANY'S NAME	:Zhejiang Udragon Pesticides And Chemicals Co., Ltd.
COMPANY'S ADDRESS	:NO.172, ZHANGJIADUN ROAD, TANGXI TOWN, LINPING DISTRICT, HANGZHOU, ZHEJIANG, CHINA
COMPANY'S CITY	:HANGZHOU
COMPANY'S COUNTRY	:CHINA
COMPANY'S ZIP CODE	:311106
PHONE NUMBER	:0086-571-86225339
FAX NUMBER	:0086-571-86229999
EMERGENCY PHONE	:0086-571-89287689

2. HAZARDS IDENTIFICATION

Causes eye irritation.

Toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration (w/w)
Penconazole	66246-88-6	200 g/L
Other ingredient (non-hazardous)	-----	Up to 1000 g/L

4. FIRST AID MEASURES

Advice on treatment: There is no specific antidote available. Treat symptomatically. The product contains a solvent that may cause chemical pneumonitis if aspirated into lungs. Watch for delayed onset of pulmonary. If ingested perform gastric lavage and administer activated charcoal.

Inhalation: If vapours or mists have been inhaled, and irritation has developed, remove the source of contamination or move victim to fresh air. The patient should be kept under

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observation and obtain medical attention if irritation persists.

Skin contact: Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with cold water and nonabrasive soap. Obtain medical attention if irritation persists.

Eye contact: Immediately flush eyes with a stream of clean water for at least 20 minutes, holding the eyelid(s) open. Obtain medical attention if irritation persists.

Ingestion: Do not induce vomiting due to the solvent. Do not give anything by mouth. Obtain medical attention immediately. If the person is alert, rinse mouth thoroughly with water.

5. FIRE FIGHTING MEASURES

Flash point: >98°C (closed cup)

Extinguishing agents: Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Fire fighting: Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways. Do not use high volume water jet, due to contamination risk. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

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Personal protective equipment: Fire may produce harmful combustion products (traces of hydrogen cyanide and oxides of nitrogen and carbon). Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.

Environmental precautions: Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs. Considered as Marine Pollutant.

Occupational spill: Do not touch-spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.
For spills: Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind. To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Label drums with its content and dispose it in accordance with local regulations. Open burning or dumping of this material is prohibited. Do not get water inside containers.

7. HANDLING AND STORAGE

Handling: Do not use near source of sparks or open flame. Harmful in contact with skin and if swallowed. Irritating to eyes and skin. Avoid contact with eyes and skin, and inhalation of spray and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet.

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Operators should change and wash clothing daily. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage: Do not store near sources of sparks, flame or heat. Keep under lock and key and out of reach of unauthorized persons, children and animals. Store in its original labelled container in isolated, dry, cool and well-ventilated area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT: If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

Respirator: An approved respirator suitable for protection from mists of pesticides is adequate. Limitations of respirator use specified by the approved agency and the manufacturer must be observed.

Clothing: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves: Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection: The use of safety goggles is recommended.
Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance; the

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employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White homogeneous solution, without coagulation and with a weak chemical odour.
Flammability:	Not flammable
Flash point:	>98°C (closed cup)
Explosion properties:	Not explosive.
Corrosiveness:	Non-corrosive.
Solubility:	Forms an emulsion in water.
Viscosity:	500 mPa·s at 20°C
Density:	1.04 g/mL at 20°C
pH:	6.8

10. STABILITY AND REACTIVITY

Stability:	Chemically and thermally stable. React with strong bases.
Storage stability:	Stable for a period of 2 years under normal warehouse conditions.
Conditions and Materials to Avoid:	Keep the product in a cool, dry place, at below 30°C. Protect from sunlight, open flame and sources of heat. Avoid contact with strong bases.
Hazardous decomposition products:	Fire may produce harmful combustion products, which are toxic and irritating.

11. TOXICOLOGICAL INFORMATION

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Acute oral LD ₅₀ :	>5000 mg/kg
Acute dermal LD ₅₀ :	>2000 mg/kg
Acute skin irritation:	Mild irritant.
Acute eye irritation:	Mild irritant.
Dermal sensitisation:	Not expected to be a skin sensitizer. Individuals may develop an allergic response.
Inhalation:	Slight toxicity. Inhalation of excessive amounts may cause respiratory irritation. <i>Technical</i> : LC ₅₀ (4hrs): > 4000 mg/l
Teratogenicity:	Embryotoxicity/fetotoxicity was observed in teratogenicity studies with rats and rabbits. Overall, the NOAEL was 75 mg/kg bw/day. After reviewing in vitro and in vivo short-term data, it was concluded that Penconazole was not genotoxic.
Carcinogenicity:	Penconazole was not carcinogenic in mice and rats. ADI: 0,0004 mg/kg bw

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Toxicity to Fish	LC ₅₀ rainbow trout= 4.3 mg/l Exposure time: 96 h
Toxicity to daphnia	EC ₅₀ <i>Daphnia magna</i> (Water flea) =11 mg/l Exposure time: 48 h
Toxicity to algae	EC ₅₀ <i>Scenedesmus subspicatus</i> = 3.0 mg/l Exposure time: 72 h

Mobility, Degradability & Accumulation:

DT₅₀ in soil is 133 to 343 days, depending on the soil type.

DT₅₀ for photolysis is 4 days in natural sunlight.

In plants, the metabolic pathways are hydroxylation of the propyl side chain, conjugation to glucosides or metabolism to triazolalanine and triazolylacetic acid.

Animals: After oral administration, Penconazole is rapidly eliminated practically to entirety

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with urine and faeces. Residues in tissues were not significant and there was no evidence for accumulation.

13. DISPOSAL CONSIDERATIONS

Pesticide disposal:

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers.

Comply with local legislation applying to waste disposal.

Container disposal:

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

TRIPLE RINSE empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and bury in an approved dumpsite. Prevent contamination of food, feedstuffs, drinking water and eating utensils. Comply with local legislation applying to waste disposal.

14. TRANSPORT INFORMATION

UN number: 3082

Transport hazard class: 9

Packaging group: III

15. REGULATORY INFORMATION

Classification and labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.

Classification:

Hazard warning labelling compulsory

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Hazardous components which must be listed on the label:

Penconazole

Symbol(s)

Xi: irritant

N: Dangerous for the environment

R-phrases(s)

R36 Irritating to eyes.

R51/53 Toxic to aquatic organisms, may cause
long-term adverse effects in the aquatic environment.

S-phrases(s)

S2 Keep out of the reach of children

S13 Keep away from food, drink and animal
feedingstuffs.

S20/21 When using do not eat, drink or smoke.

S35 This material and its container must be disposed of
in a safe way.

S57 Use appropriate container to avoid environmental
contamination.

Exceptional labeling

To avoid risks to man and the environment, comply
with the instructions for use.

Further information

WHO-classification: III (Slightly hazardous)

16. OTHER INFORMATION

All information and instructions provided in this MSDS are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the product as such in case of formulations of mixes it is necessary to ascertain that a new danger will not appear, it is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use handle, dispose or in any way come in contact with the product.