



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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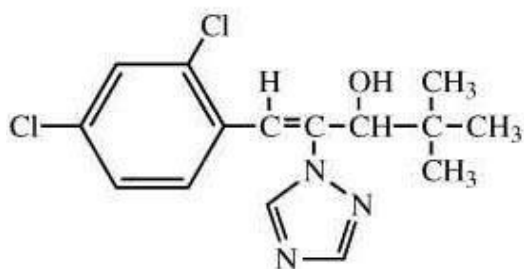
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1. Chemical Product Identification

Product Name: Diniconazole

Molecular Formula: C₁₅H₁₇Cl₂N₃O

Structural Formula:



Molecular Weight:326.22

Chemical Name:

(E) -(RS)-1-(2,4-dichlorophenyl)-4,4-dimethyl-2-(1H-1,2,4-triazol-1-yl)pent-1-en-3-ol

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Diniconazole	83657-24-3	96.0
others		4.0

3. Hazards Identification



Harmful if swallowed or in contact with skin. Wear protective gloves/ protective clothing
Harmful if inhaled. May cause respiratory irritation. Harmful to aquatic life, avoid release to the environment. Wash hands and container with soap and lots of water. Dispose of contents/container to an approved waste disposal plant. Keep out of reach of children.

4. First Aid Measures

If in eyes, hold eye open and rinse slowly and gently with water for 15-20min. Remove contact lenses.

If skin contact, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20min.

If swallowed, call poison control centre or doctor immediately of treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control centre or doctor.

If inhaled, move person to fresh air.

If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control centre or doctor for treatment advice.

5. Fire-Fighting Measures

Extinguishing media;

Fire extinguishing media: Water spray, foam, carbon dioxide, dry extinguishing media.

Special fire fighting procedures: Fire fighters should use self contained breathing apparatus and full turnout gear. Prevent runoff of fire water. Avoid exposure to smoke.

Unusual fire and explosion hazards: Noxious fumes may be emitted under fire conditions.

6. Accidental Release Measures

Personal cautions:

keep unnecessary away. Keep people away from upwind spill/leak. Wear appropriate personal protective equipment. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.

Cleaning methods:

This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead



to waterways. Stop the flow material, if this is without risk. Collect spillage. Following product recovery, flush area with water.

Environmental cautions:

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling And Storage

Handling

Precautions to avoid fire and explosion:

- avoid accumulation of electrostatic charges
- keep away from flames and sparks. Do not smoke.

Handle under adequate ventilation.

Storage

In original packaging under normal storage condition. Packages should not be exposed to direct sunlight and must be kept unopened and undamaged.

Store in a cool, dry place.

8. Exposure Controls / Personal Protection

Personal protective equipment

Hand protection:

Chemical-resistant gloves

Eye protection:

Chemical tight goggles, full faceshield in addition if splashing is possible.

Body protection: Protective suit

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or snuff taking at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical And Chemical Properties

Appearance: Light yellow or grey white solid

Melting point: 131-156°C



Vapor pressure: 2.93mPa at 20°C, 4.9mPa at 25°C

Relative Density: 1.32g/L

Partition coefficient: $KowlogP = 4.3$ at 25°C

Soluble in xylene, acetone, methanol, chloroform; less in xylene, hexane.

Solubility (in water) : slightly 4mg/l at 25°C

Other solubilities: lowly soluble in water (4.0mg/L at 20°C) acetone (120g/L), methanol (119g/L), xylene (14g/L), hexane (700mg/L)

Acidity (as H₂SO₄): ≤0.5%

Flammability: Diniconazole 96% TC is considered to not flammable

10. Stability And Reactivity

Conditions to avoid: fire, feed, food and beds of water

Products to avoid: strong oxidizing agents, strong bases.

Thermal decomposition: not applicable

Hazardous decomposition products: Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

Hazardous reaction: none

11. Toxicological Information

Acute oral LD50 for rat: 474 a.i.mg/kg

Acute dermal LD50 for rat: >5000 a.i.mg/kg.

Inhalation LC50 (4h) for rat: 2.77 a.i. mg/L.

Skin irritation: Non- irritating to skin (rabbits).

Eye irritation: mild-irritating to eyes (rabbits).

Skin sensitization: Not a skin sensitiser (guinea pigs).

12. Ecological And Ecotoxicological Information

Effect on birds: moderate toxicity to birds, acute oral LD50 for Bobwhites quail is 1490 a.i. mg/kg.

Effect on fish: moderate toxicity to fish, acute 96 hour LC50 for Rainbow trout is 1.58 a.i.mg/L.

Effect on aquatic invertebrates: moderate toxicity to aquatic invertebrates, acute 48 hour EC50 for Daphnia magna is 7.4 a.i.mg/L.



Effect on honeybees: moderate toxicity to honeybees, contact acute 48 hour LD50 is 20 a.i. µg/bee.

13. Disposal Considerations

Must be dumped or incinerated in accordance with local regulations.

Contaminated packaging:

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

Contaminated packaging should be emptied as far as possible and disposed of in accordance with official regulations after being thoroughly cleaned.

Uncontaminated packaging may be treated as household waste.

14. Transport Information

CHINA: Dangerous goods for transport

Class: 6.1

UN No: UN 2876

Packaging Group III

15. Regulatory Information

Not applicable

16. Other Information

All information and instructions provided in this Material Safety Data Sheet (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 new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on 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. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.