

MATERIAL SAFETY DATA SHEET

ORIOUS 25 EW

Special fire-fighting procedures	: Fight fires from a protected location. Dike fire control water for later disposal.
Hazardous thermal (de)composition products	: CO, CO ₂ , NO _x and Chlorides, and Oxidizing agents.
Protection of fire-fighters	: Wear suitable protective clothing. Self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Use appropriate protection (see section 8).
Environmental precautions	: Dispose of this material and its container at hazardous or special waste collection point, in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out.
Methods for cleaning up	: In the event of minor spillage: Absorb in sand or other inert material. Use appropriate containment to avoid environmental contamination. In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

7. HANDLING AND STORAGE

Handling	: Do not breathe fumes. Avoid contact with skin and eyes.
Storage	: Keep locked up. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place (<50°C).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures	: Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Hygiene measures	: Wash hands thoroughly after handling. Wash clothing separately before re-use.
Occupational Exposure Limits	: Tebuconazole : Not established.
<u>Common name</u> TLV (USA)	: Tebuconazole : Not established.
<u>Personal protective equipment</u>	
Respiratory system	: During spraying wear suitable respiratory equipment.
Skin and body	: Wear suitable protective clothing and chemical resistant boots.
Hands	: Wear suitable gloves.
Eyes	: Safety goggles or face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid.
Colour	: Clear yellow.
Odour	: Odourless.
Molecular weight	: Tebuconazole: 307.8.

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ORIOUS 25 EW

Specific gravity (H₂O=1) : 1.08 g/cm³ at a temperature of 20°C.
 Solubility in water : Emulsifiable.
 Octanol/water partition coefficient : Tebuconazole: log Pow = 3.22.
 pH : 4 - 5.

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.
Conditions to avoid : Protect from (sun)light, open flame and sources of heat. Decomposes upon heating.
Materials to avoid : Avoid contact with; strong acids and strong bases.
Hazardous reactions : Hazardous polymerization will not occur.
Hazardous decomposition products : CO, CO₂, NO_x and Chlorides, and Oxidizing agents.

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Oral : LD₅₀ > 5000 mg/kg, (M) (rat).
 : LD₅₀ > 4000 mg/kg, (F) (rat).
Acute toxicity - Dermal : LD₅₀ > 5000 mg/kg, (rat).
Acute toxicity - Inhalation : LC₅₀ > 5 mg/l, 4 hours (rat).
Skin irritation : Not irritating to skin (rabbit).
Eye irritation : Moderately irritating (rabbit).
Sensitization : Non sensitizer

12. ECOLOGICAL INFORMATION

Toxic to aquatic organisms.

Ecotoxicity : Fish: LC₅₀ = 6.7 mg/l 96 hours.

Common name : Tebuconazole
Ecotoxicity : EC₅₀ = 11.8 mg/l 48 hours, (Daphnia magna).
 ErC₅₀ = 4.01 mg/l 96 hours, (algae).

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Disposal according to the local legislation.

14. TRANSPORT INFORMATION

International transport regulations

UN number : 3082

Land - Road/Railway

Proper shipping name : Environmentally hazardous substance, liquid, N.O.S., Tebuconazole (250 g/l) + N,N-dimethyl fatty acid amide (610 g/l).

ADR/RID Class : 9

ADR/RID Item number : 11(c)

Packing group : III

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ORIOUS 25 EW

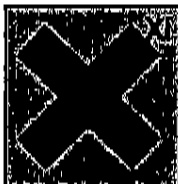
Hazard Identification Number	: 90
<u>Inland waterways</u>	
Proper shipping name	: Environmentally hazardous substance, liquid, N.O.S., Tebuconazole (250 g/l) + N,N-dimethyl fatty acid amide (610 g/l).
<u>Sea</u>	
Proper shipping name	: Environmentally hazardous substance, liquid, N.O.S., Tebuconazole (250 g/l) + N,N-dimethyl fatty acid amide (610 g/l).
IMDG Class	: 9
IMDG Page number	: 9028
Packing group	: III
Medical First Aid Guide (MFAG)	: None
Emergency Schedules (EmS)	: None
<u>Air</u>	
Proper shipping name	: Environmentally hazardous substance, liquid, N.O.S., Tebuconazole (250 g/l) + N,N-dimethyl fatty acid amide (610 g/l).
UN/ID Number	: 3082

National transport regulations

No additional national transport regulations are known to the supplier

15. REGULATORY INFORMATION

Classification	: This product is provisionally labelled by the supplier in accordance with the suppliers understanding of the EU regulations
Hazard symbol(s)	: Xi, N



IRRITANT (Xi)



DANGEROUS FOR THE ENVIRONMENT

Risk phrases	: R36/38: Irritating to eyes and skin. R51: Toxic to aquatic organisms.
Safety phrases	: S24/25: Avoid contact with skin and eyes. S37/39: Wear suitable gloves and eye/face protection. S56: Dispose of this material and its container at hazardous or special waste collection point.
Contains	: 250 g/l Tebuconazole. 610 g/l N,N-dimethyl fatty acid amide.

16. OTHER INFORMATION

Recommended use	: Fungicide.
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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.

HISTORY

Date of printing	: 09/02/2001
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Date of issue	: 09/02/2001
Version	: 001.00.00

The version-number is made up of three parts; part 1 is a general information code, part 2 a country-specific code and part 3 a language-specific code