

DEFENCE 250 EC
MATERIAL SAFETY DATA SHEET

SECTION-1

PRODUCT /COMPANY IDENTIFICATION

Product Name	:	DEFENCE 250 EC
Active Ingredient	:	Difenoconazole 250 g/L EC
Chemical Name	:	3-Chloro-4-[(2RS, 4RS; 2RS,4SR)-4-methyl-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-2-yl]phenyl-4-chlorophenyl ether.
CAS No	:	119446-68-3
Type of Formulation	:	Emulsifiable concentrate (EC)
Indented Use	:	Commercial Fungicide
Company/Supplier details	:	SINERIA HOLLAND BV. Randwycksingel 20-A015 6229 EE, Maastricht. The Netherlands www.sineria.com

SECTION-2

COMPOSITION/ INFORMATION ON INGREDIENTS

Active Ingredient	CAS No	QTY (g/L)
Difenoconazole	119446-68-3	250 g/L

SECTION-3

HAZARD IDENTIFICATION

Pictograms



H-Statements

H302	:	Harmful if swallowed
H319	:	Causes serious eye irritation
H400	:	Very toxic to aquatic life
H410	:	Very toxic to aquatic life with long-lasting effects

Precautionary Statements

P102	:	Keep out of reach of children.
P260	:	Do not breathe mist, vapors
P270	:	Do not eat, drink or smoke when using this product.
P280	:	Wear protective gloves, protective clothing and eye and/or face protection.

SECTION-4 FIRST AID MEASURES

- General Advice : In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
First aider: Pay attention to self-protection!.
- If ingestion : Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.
- If inhaled : If product is inhaled, remove person to fresh air. If not breathing, give artificial respiration. Seek medical attention if breathing problems develop.
- If on skin : Remove contaminated clothing. Wash skin and hair thoroughly; do two soap and water washings.
- If in eyes : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- Note to physicians : Treat symptomatically

SECTION-5 FIRE FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
- Specific hazards arising from the chemical : No specific hazard known.
- Firefighting Instructions : Fire fighters should wear full protective gear, including self-contained breathing apparatus. Keep unnecessary people away. If it can be done safely, remove intact containers from the fire.
In the event of fire, wear self-contained breathing apparatus.
In the event of fire and/or explosion do not breathe fumes.

SECTION-6 ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : In case of spillage it is important to take all steps necessary to: Avoid contact with the spilled material or contaminated surfaces.
Extinguish or remove any sources of ignition. When dealing with spills do not eat, drink or smoke and wear protective clothing and equipment. Keep people and animals away. Prevent spilled material

- from entering drains or watercourses.
- Environmental precautions : Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.
- Reposition any leaking containers so as to minimize leakage. Dam and absorb spill with an absorbent material (eg. sand or soil). Shovel the absorbed spill into drums
- Methods and materials for containment and cleaning up : Contain spill and absorb with earth, sand, clay, or other absorbent material. Collect and store in properly labelled, sealed drums for safe disposal. Deal with all spillages immediately). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

SECTION-7

HANDLING AND STORAGE

- Precautions for safe handling : Safe work practices are recommended. Avoid contact with eyes and skin.
- When opening the container and preparing spray wear appropriate PPE (refer Section 8).
- Do not spray under high wind conditions.
- Conditions for safe storage : Keep out of reach of children, unauthorized persons and animals.
- Store in tightly sealed original containers in a dry secure place away from fertilizers, feed and food.
- Incompatibilities : Store out of direct sunlight and extreme temperature.

SECTION-8

EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Engineering controls : Use only with adequate ventilation. Keep container tightly closed. Do not generate dust.
- Personal protective equipment (PPE)**
- Respiratory protection : Use NIOSH/MSHA approved respirator appropriate for exposure of concern.
- Hand protection : Protective gloves
- Eye protection : Wear safety glasses with side shields. Additionally, wear a face shield where the possibility exists for face contact due to splashing, spraying or airborne contact with this material.
- Skin and body protection : Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket.

SECTION-9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Yellow to brown liquid
Odor	:	Aromatic
pH	:	5-9
Flash Point	:	>54°C
Explosive Properties	:	Non-Explosive
Oxidizing properties	:	Not oxidizing
Stability	:	Stable under normal temperature and pressure

SECTION-10

STABILITY & REACTIVITY

Possibility of Hazardous Reactions	:	No dangerous reaction known under conditions of normal use and storage conditions.
Chemical Stability	:	This product is chemically stable under recommended conditions of storage, use and temperature.
Conditions to Avoid	:	Protect this product from light. Store in the closed original container in a dry, cool, well ventilated area out of direct sunlight.
Incompatible materials	:	Strong acids, strong bases, strong oxidizing agents.
Polymerization	:	This product will not undergo polymerization reactions.

SECTION-11

TOXICOLOGICAL INFORMATION

Acute oral LD ₅₀ , mg/kg rats	:	>4000
Acute dermal LD ₅₀ , mg/kg rabbits	:	>4500
Acute Inhalation LD ₅₀ , mg/kg rat	:	>6. 98 (4h)
Skin Irritation (rabbits)	:	Not an irritant
Eye Irritation (rabbits)	:	Mild irritant
Skin Sensitization (guinea pigs)	:	Not a sensitizer

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ECO-TOXICOLOGICAL INFORMATION

Acute oral LD ₅₀ for Mallard duck	:	>4550 mg/kg
Acute oral LD ₅₀ for Japanese quail	:	>4000 mg/Kg
Rainbow trout LC ₅₀ , (96h)	:	>3.20 mg/L
Daphnia LC ₅₀ (48h)	:	>1.8 mg/L
Bees (LD ₅₀ , µg/bee)	:	> 400 (contact); 500 (oral)
Worms (LC ₅₀ , for Eisenia fetida)	:	>1000mg/Kg soil

SECTION-13

DISPOSAL CONSIDERATIONS

- Waste from residues/unused products : Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated packaging : Improper disposal or reuse of this container may be dangerous and illegal.
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SECTION-14

TRANSPORT INFORMATION

- General Transport Information : It is considered good practice not to transport agricultural chemical products with food, food related materials and animal feed products.
- Proper shipping Name [Land/Air/Sea] : Environmentally hazardous substance, liquid, N.O.S.
(Contains Difenconazole)
- UN Number : 3082
- Class : 9
- Packaging group : III
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SECTION-15

REGULATORY INFORMATION

GHS07: Harmful

GHS09: Environmental hazard

H-Statements

- H302 : Harmful if swallowed
- H319 : Causes serious eye irritation
- H400 : Very toxic to aquatic life
- H410 : Very toxic to aquatic life with long-lasting effects

Precautionary Statements

- P102 : Keep out of reach of children.
- P201 : Keep away from heat, sparks, open flames. - No smoking
- P260 : Do not breathe mist, vapors
- P270 : Do not eat, drink or smoke when using this product.
- P280 : Wear protective gloves, protective clothing and eye and/or face protection.
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SECTION-16 OTHER INFORMATION

The information contained in the Material 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 with other materials or in processes other than those specifically described herein.

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