

## Defence 250EC™

### MATERIAL SAFETY DATA SHEET

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#### SECTION 1 Chemical product and Company identification

Product Name: Defence 250EC™ (Difenoconazole)

Chemical name: *cis-trans*-3-chloro-4-[4-methyl-2-(1*H*-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-2-yl]phenyl 4-chlorophenyl ether

Formula: C<sub>19</sub>H<sub>17</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>3</sub>

Chemical family: Triazole

Fungicide Group: C

Product Use: Commercial Fungicide

Supplier: SINERIA HOLLAND BV  
Randwycksingel 20-A015  
6229 EE Maastricht The Netherlands  
www.sineria.com

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#### SECTION 2 Composition/Information on Ingredients

<u>Product Name</u>	<u>Quantity</u>	<u>CAS RN</u>
Difenoconazole	250 gr/lit	119446-68-3

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#### SECTION 3 Hazards Identification

Symptoms of Acute Exposure: Causes mild eye and skin irritation.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

Unusual Fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

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#### SECTION 4 First Aid Measures

General advice: Move out of dangerous area. Remove contaminated clothing immediately and dispose of safely. Place and transport victim in stable position (lying sideways). Contact a doctor or Poisons Information Centre.

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Ingestion: Rinse mouth. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Inhalation: Move to fresh air. Keep patient warm and at rest position. If person is not breathing give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center.

Skin contact: Wash off immediately with soap and plenty of water. Call a physician or poison control center immediately.

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After the first 5 minutes remove contact lenses, if any, any continue rinsing. Call a physician or poison control center immediately.

Notes to Physician – Treatment: There is no specific antidote if this product is ingested. Treat symptomatically.

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### **SECTION 5 Fire Fighting Measures**

Flash point: > 100°C

Flammability: Not Flammable

Unusual Fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Suitable extinguish media: Dry chemical, foam, sand and CO2 extinguishing media.

Fire fighting instructions: As in any fire, wear self-contained breathing apparatus pressure-demand and full protection gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke, fumes and breathing vapors. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. This product is not flammable under normal conditions of use

Further information: Contain the spread of the fire-fighting media. Do not allow run-off from fire-fighting to enter drains or water courses.

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### **SECTION 6 Accidental release measures**

General and disposal: Use proper protective equipment to minimize personal exposure. Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with regulations.

Personal Precautions: Avoid contact with spilled product or contaminated surfaces. Wear personal protective equipment. Unprotected persons must be kept away. Keep away sources of ignition.

Environmental Precautions: Do not discharge into the drains/surface water/groundwater.

Methods for Cleaning Up: Prevent spill from spreading or entering waterways or drains. Take up with absorbent material such as sawdust, peat or binding agent for chemicals. Fill material along with any contaminated soil etc. into sealable containers. Clean affected area with an aqueous detergent and a small

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amount of water. Absorb this with hydrated lime and place in a sealable drum. On completion of clean-up remove and wash all protective clothing and equipment with detergent and water. Any heavily contaminated clothing should be placed in a plastic garbage bag and placed in a sealable drum. Do not smoke, eat or drink during the clean-up operation.

Additional Advice: Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

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### **SECTION 7 Handling and storage**

Handling: Avoid contact with eyes or clothing. Do not use near heat or open fire.

Users Should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage: Store in a cool, dry and well ventilated place out of reach of children. Keep product in the original container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

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### **SECTION 8 Exposure controls/Personal protection**

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

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### **SECTION 9 Physical & Chemical properties**

Appearance: Yellow transparent liquid

Boiling Point: Not Available

pH: 6-9

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Water Content: 0.5% max

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#### **SECTION 10 Stability & Reactivity**

Stability: Stable under normal condition. No hazardous reactions are expected when stored and handled according to prescribed instructions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

Materials to Avoid: None known.

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#### **SECTION 11 Toxicological Information**

##### Acute Toxicity /Irritation Studies

Ingestion: Acute oral LD<sub>50</sub> 1453 mg/kg (rats); LD<sub>50</sub> >2000 mg/kg (mice)

Inhalation: Acute inhalation LC<sub>50</sub> >3300 mg/m<sup>3</sup> air (Rat) 4hr

Dermal: Acute percutaneous LD<sub>50</sub> (Rabbits) >2010 mg/kg

Eye Contact: Not Irritating (Rabbit)

Skin Contact: Not Irritating (Rabbit)

Skin Sensitization: Not Sensitizing (Guinea Pigs)

NOEL (2 y): 1.0 mg/kg b.w. daily (rats)

Other: Not teratogenic or mutagenic.

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#### **SECTION 12 Ecological Information**

##### Eco-toxicity data (Active Ingredient)

Birds: 9-11 day LD<sub>50</sub> for mallard ducks >2150 mg/kg. LC<sub>50</sub> for mallard ducks >5000 ppm.

Fish: LC<sub>50</sub> (96 h) for rainbow trout 0.8 mg/l; for sheepshead minnow 0.82 mg/l

Bees: Non-toxic to honeybees; LD<sub>50</sub> (oral) >187µg/bee; LC<sub>50</sub> (contact) >100µg/bee.

Worms: LC<sub>50</sub> for earthworms >610 mg/kg.

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### **SECTION 13 Disposal Considerations**

After intended use: Triple or (preferably) pressure rinse container before disposal. Add rinsings to the spray tank. Do not dispose of undiluted chemicals on site. Break, puncture, crush and bury rinsed container in a local authority landfill (check local statutory requirements). If not available, bury the container below 500 mm in a marked disposal pit specifically set up for this purpose, clear of waterways, vegetation and roots. Empty container and product should not be burnt.

After spill or accident: Dispose of sealed containers at an approved local waste disposal site.

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### **SECTION 14 Transport Information**

Hazard Class: 9

UN Number: 3082

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### **SECTION 15 Regulatory Information**

- Xn: Harmful
  - N: Dangerous for the environment
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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 use with other materials or in processes other than those specifically described herein.

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