

# Sharda International Africa (Pty) Ltd

P.O. Box 82021, Southdale, 2135, South Africa.

Tel: 031 764 3011, Tel: 087 822 2397

Email: rsa.regn@shardaintl.com, Website: <http://www.shardaintl.com>

(Co. Reg. No. 2010/002268/07)

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## SAFETY DATA SHEET

### “SHARDA DIFLUBENZURON 250 WP”

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#### 1. IDENTIFICATION OF PRODUCT AND COMPANY

**Name of Product:** “SHARDA DIFLUBENZURON 250 WP”

**Active Ingredient:** Diflubenzuron 250 WP

**Product Use:** Insecticides

**Registration holder:** Sharda International Africa (Pty) Ltd

**Address:** P.O. Box 82021, Southdale, 2135

**Contact Tel. No.:** 031-764-3011

**Poison Centres:** UNITAS Hospital: 0800-111-9900  
Tygerberg Hospital: 021-931-6129  
Netcare 911: 082911

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#### 2. HAZARD IDENTIFICATION (Substance hazard class and category)

**Active Ingredient and Formulation Health Risk:** May be slightly irritating to eyes.

**Inhalation:** Inhalation may cause coughing and slight irritation.

**Skin Contact:** Prolonged exposure may cause mild irritation.

**Eye Contact:** Can cause mild irritation.

**Ingestion:** Ingestion may cause nausea, vomiting, stomach ache and diarrhoea.

**Environmental Risks:** Toxic to insects and aquatic organisms.

**Other Risks:** Do not contaminate any water body.

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#### 3. COMPOSITION AND INFORMATION ON INGREDIENTS (For each hazardous substance)

**3.1 Active Ingredient:** Diflubenzuron.

**Chemical Name:** 1-(4-chlorophenyl)-3-(2,6-difluorobenzoyl)urea.

**Chemical Formula:** C<sub>14</sub>H<sub>9</sub>ClF<sub>2</sub>N<sub>2</sub>O<sub>2</sub>

**CAS No.:** [35367-38-5]

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## 3.2 Formulation

**Principal Components:** Diflubenzuron.

**Components contributing to risk:**

**Concentration:** 250 g/kg

**UN No.:** 3077

Chemical Identity	CAS No.	Concentration
Diflubenzuron	[35367-38-5]	250 g/kg
Clay		465 g/kg
Wetting and dispersing agents		285 g/kg

## 4. FIRST AID MEASURES

**Eye contact:** Flush eyes with plenty of clean water for at least 15 minutes.  
If irritation persists, obtain medical attention.

**Skin contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.

**Inhalation:** Remove patient to fresh air. Administer symptomatic treatment and obtain medical attention.

**Ingestion:** Do not induce vomiting. Rinse mouth with water. Obtain medical attention.

**Advice to doctors / physician:** Treat symptomatically.

**Antidote:** No known antidote.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** dry chemical, water fog, foam, CO<sub>2</sub>, sand.

**Fire and Explosion Hazards:** Not a direct fire and explosion hazard.

**Hazardous Products of Combustion:** Irritating fumes; oxides of carbon and nitrogen.

**Fire Fighting Equipment:** Wear respiratory protection. In well ventilated areas wear a full face mask with combination filters. In enclosed areas wear a self-contained breathing apparatus or a respirator with an independent air supply.

## 6. ACCIDENTAL RELEASE MEASURES (Spillage)

**Personal Precautions and Protective Equipment:** Use personal protection equipment.

**Emergency Procedures:** Take up spilled product with absorbent material such as soil, sawdust or something similar. Place spilled material and contaminated cleaning materials in a closed container for disposal in an approved manner.

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**Environmental Precautions:** Do not allow contamination of drains or any water body.

Refer to Section 13 for disposal of spilled material.

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## 7. HANDLING AND STORAGE

Good industrial practice in housekeeping and personal hygiene should be followed at all times when handling this product. Areas for handling and storage should be well ventilated.

### **Handling:**

Avoid dust contact with eyes.

Do not eat, drink or smoke while handling this product.

Wash hands and exposed skin thoroughly after handling or contact with this product.

Do not contaminate drains, sewers and water bodies when disposing of equipment rinse water.

Refer to Section 13 for disposal of rinse water.

Observe all safeguards on the label as to cleaning and destruction of the container.

### **Storage:**

Keep out of reach of children, uninformed persons and animals.

Store in a cool dry place away from food, drink, seed and animal feed.

Store only in the original labelled container.

Minimum Shelf Life: 2 years.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### **Personal Protective Clothing**

To reduce personnel exposure to this product, it is recommended to use appropriate personal protective clothing when handling this product.

Respiratory Protection: Wear a face mask or respirator when handling the powder.

Hand Protection: Wear chemical resistant gloves when handling the powder.

Eye Protection: Wear goggles or safety glasses.

Skin and Body Protection: Wear long sleeve overalls to minimize skin contact.

### **Exposure Control Parameters**

Time Weighted Average (TWA): Respirable dust - 3,0 mg/m<sup>3</sup>; Total inhalable dust – 10,0 mg/m<sup>3</sup>.

NGV: Respirable dust - 5,0 mg/m<sup>3</sup>; Total inhalable dust – 10,0 mg/m<sup>3</sup>.

### **Engineering Controls**

Good ventilation and an exhaust system to prevent the build-up of dust.

### **Hygiene Measures**

Do not eat, drink, smoke or go to the bathroom while handling this product.

Wash face, hands and exposed skin after handling this product.

Wash contaminated clothing after exposure to this product.

### **Re-entry Interval**

Do not enter the treated area until the spray deposit has dried unless wearing protective clothing.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES OF PRODUCT

These are typical data based on tests but may vary from sample to sample. These typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

<b>Appearance, Colour</b>	Brown
<b>Form</b>	Powder
<b>Odour</b>	Typical
<b>pH</b>	7.3
<b>Flash Point</b>	Not applicable.
<b>Flammability</b>	Non-flammable.
<b>Explosive Limits</b>	Not explosive.
<b>Melting Point</b>	230 °C
<b>Boiling Point</b>	240 °C
<b>Decomposition Temperature</b>	Does not decompose at the boiling point.
<b>Vapour Pressure</b>	0.000128 Pa at 25 °C
<b>Bulk Density</b>	0.298 g/ml
<b>Solubility</b>	Water : Diflubenzuron – 0.08 mg/l at pH 5.5 at 20 °C.
<b>Partition Coefficient</b>	Diflubenzuron: Log P <sub>ow</sub> = 3.41 at 20 °C.
<b>Viscosity</b>	Not viscous.
<b>Volatility</b>	Not volatile.
<b>Corrosivity</b>	Not corrosive.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal storage conditions.

**Reactivity Hazards:**

**Hazardous Decomposition:** Oxides of carbon and nitrogen.

**Incompatibility:** Strong acid and alkaline media and oxidizing agents.

**Conditions to Avoid:**

## 11. TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and health professionals.

Data obtained on this and similar products and components are summarised below.

**Acute Oral Toxicity:** Rat, LD50: > 2 000 mg/kg body weight

**Acute Dermal Toxicity:** Rat, LD50: > 1000 mg/kg body weight

**Skin Irritation/Corrosion:** Rabbit, Not an irritant.

**Eye Irritation/Damage:** Rabbit, Mild reversible eye irritant.

**Skin Sensitization:** Guinea Pig, Not a skin sensitizer.

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**Mutagenicity:** Negative.

**Carcinogenicity:** Negative.

**Toxicity to Reproduction and/or Fertility:** Not a reproductive toxin.

**Developmental Toxicity / Teratology:** Not a developmental toxin.

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## 12. ECOLOGICAL INFORMATION

This section is intended for use by ecotoxicologists and environmental specialists.  
Data obtained on this and similar products and components are summarised below.

### **Aquatic Toxicity, Algae and/or Aquatic Plants:**

Green Algae (*Selenastrum capricornutum*): Acute toxicity, 5 days, EC<sub>50</sub>: > 80 mg a.i./ℓ

### **Aquatic Toxicity, Fish:**

Zebra Fish (*Brachydanio rerio*): Acute toxicity, 96 hours, LC<sub>50</sub>: > 0.2 mg/ℓ

Rainbow Trout (*Oncorhynchus mykiss*): Acute toxicity, 96 hours, LC<sub>50</sub>: > 106 mg/ℓ

### **Aquatic Toxicity, Invertebrates:**

Water Flea (*Daphnia magna*), 48 hours, EC<sub>50</sub>: 3.2 µg/ℓ

### **Arthropod Toxicity**

Honey bee (*Apis mellifera*): Acute Oral, LD<sub>50</sub>: > 100 µg/bee

### **Avian Toxicity**

Bobwhite Quail (*Colinus virginianus*): Dietary toxicity, 8 days, LC<sub>50</sub>: > 4 640 ppm diet

Bobwhite Quail (*Colinus virginianus*): Acute oral toxicity, single dose, LD<sub>50</sub>: > 5 000 mg/kg bw

Mallard Duck (*Anas platyrhynchos*): Dietary toxicity, 8 days, LC<sub>50</sub>: > 4 640 ppm diet

### **Soil Organism Toxicity, Invertebrates**

Earthworm (*Eisenia foetida*): Acute toxicity, 14 days, LC<sub>50</sub>: > 780 mg/kg dry soil

**Bioaccumulation:** Bioaccumulation is not expected.

**Persistence / Degradability:** Strongly absorbed in soil; DT<sub>50</sub>: < 7 days

**Mobility in Soil:** Virtually immobile.

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## 13. DISPOSAL CONSIDERATIONS

### **Product**

Recycle if appropriate equipment and/or facilities are available.

Burn only in controlled high temperature incinerator.

Dispose of as hazardous industrial waste.

Keep out of drains, sewers, ditches and water ways.

Follow all local / regional / national / international regulations.

### **Containers**

Triple or pressure rinse empty containers.

Pour rinse water into spray tank; spray on target area.

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Store for collection by approved waste or recycling disposal service.

Dispose of as non-hazardous industrial waste.

Do not use containers for any other purpose.

Follow all local / regional / national / international regulations.

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## 14. TRANSPORT INFORMATION

For safe transport of hazardous substances apply appropriate local codes, classifications and regulations.

**UN No.:** 3077

**UN Shipping Name:** Environmentally hazardous substance, solid, N.O.S.

**Class:** 9

**Packaging Group:** III

**Marine Pollutant:** Positive.

**Special Transport Precautions:**

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## 15. REGULATORY INFORMATION

RSA: Registration Number L , Act Number 36 of 1947.

SEARCH: Registration in the following countries –

RSA Classification: Group III (Blue, Caution)

Risk Phrases: R50 – Very toxic to aquatic organisms.

Safety Phrases: S2 – Keep out of reach of children (uninformed persons and animals).

S13 – Store away from food, drink and animal feed.

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

S29 – Do not empty into drains.

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## 16. OTHER INFORMATION

The information presented is not necessarily exhaustive but is regarded as representative. These data are presented in good faith and are believed to be correct. No representation as to the completeness or accuracy of these data is made. No responsibility for damages of any nature whatsoever resulting from the use of or reliance upon this information will be accepted. In the event of any uncertainty, consult the supplier before use.

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