

ONLY FOR SALE AND USE BY REGISTERED SEED SUPPLY COMPANIES DOING BULK SEED TREATMENT.

## UNIVERSAL PONTAC 600 FS WHITE

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT & COMPANY IDENTIFICATION

**Product Name:** PONTAC 600 FS WHITE  
 Insecticide  
**UN No.:** 3082  
**Supplier:** Universal Crop Protection (Pty) Ltd.  
**Co. Reg. No.:** 1983/008184/07  
 PO Box 801,  
 Kempton Park, 1620, South Africa  
**Telephone:** (011) 396 2233  
**Fax:** (011) 396 4666  
**Website:** [www.villacrop.co.za](http://www.villacrop.co.za)

**Emergency telephone numbers:**  
**24 Hr Transport / Spill emergency no:**  
 Bateleur: +27 83 1233 911 or +27 860 333 911  
 (Client: Villa Crop Protection)

**Poisoning:**  
 Griffon Poison Information Centre +27 82 446 8946  
 Western Cape Poisons Tel. Service +27 861 555 777  
 Tygerberg Hospital +27 21 931 6129

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Common name:** Chlothianidin  
**Chemical name:** (E)-1-(2-chloro-1, 3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine  
**(IUPAC)**  
**CAS no:** 210880-92-5  
**Chemical family:** Neonicotinoid  
**Chemical formula:** C<sub>6</sub>H<sub>8</sub>ClN<sub>5</sub>O<sub>2</sub>S  
**Molecular weight:** 249.7  
**Use:** A systemic insecticide seed treatment for the control of pests as indicated.  
**Formulation:** Chlothianidin 600 g/l  
 Flowable seed treatment  
**Hazardous ingredients of Toxicological concern:**  
 Chlothianidin slightly hazardous – 60 %  
 Other non hazardous ingredients: to 100%  
**Symbols:** Xi, N  
**Indication of danger:** Irritating substance  
 Harmful substance  
**Risk phrase:** R 20/21/22, R 36/38, R 51/R 53

### 3. HAZARD IDENTIFICATION

**Toxicity Class:** WHO (a.i.) III  
**Skin Contact:** May irritate skin. Harmful if absorbed through skin. This product is not a skin sensitizer.  
**Eye Contact:** This product may be mildly irritating to eyes. Avoid contact with eyes.  
**Inhalation:** Do not breathe vapours or spray mist.  
**Ingestion:** Harmful if swallowed. Do not take internally.  
**Environmental: TOXIC TO AQUATIC ORGANISMS**  
**Fire and Explosion:** Not flammable and explosive

### 4. FIRST AID MEASURES AND PRECAUTIONS

**Inhalation:** Remove to fresh air. If not breathing, call an ambulance then follow standard resuscitation practices.  
**Skin contact:** Remove contaminated clothing, flush with soap and water for at least 15 minutes, and seek medical attention.  
**Eye contact:** Flush with plenty of water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention if irritation begins and/or persists.  
**Ingestion:** Seek medical attention immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting. Do not give anything by mouth to an unconscious person.  
**Note to Physician:** There is no specific antidote. Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**Flammability:** Not flammable.  
**Extinguishing Media:** Water spray, foam, dry agent, carbon dioxide.  
**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus. Fight fires from a protected location. Dike fire control water for later disposal.  
**Hazardous thermal decomposition products:** Nox, CO, CO<sub>2</sub>, HCl & Chloride.  
**Fire fighting:** Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Dyke fire control water for later disposal.

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Do not scatter the material. Avoid pollution of waterways. Avoid the accumulation of polluted run-off from the site. **Personal protective equipment:** Fire may produce irritating or poisonous vapours (toxic compounds of carbon, nitrogen and chlorine), mists or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES (Spillage)

**Personal precautions:** Keep unauthorized people away. Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.

**Environmental precautions:** Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs. Considered as Marine Pollutant. **Occupational spill:** Do not touch spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals. **For spills:** Soak up with absorptive material such as sand or other suitable inert material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind.

### 7. HANDLING AND STORAGE REQUIREMENTS

**Handling:** Product may be mildly irritating to eyes and skin. Avoid contact with eyes and skin, and inhalation of spray and vapour. Use with adequate ventilation. Handle and open container in a manner as to prevent spillage.

**Storage:** Keep under lock and key and out of reach of unauthorized persons, children and animals. Store in its original labelled container in isolated, dry, cool and well-ventilated area. Do not store above 35 C. Do not contaminate ponds, lakes, streams or any source of water. Keep out of reach of children. Handle in a well ventilated area. Local exhaust recommended. Use personal protective equipment to prevent contact with skin and eyes. Do not drink, eat or smoke while handling. Wash hands before eating, drinking or smoking. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

#### PERSONAL PROTECTIVE EQUIPMENT:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

#### Respirator:

Ensure good ventilation. For maximum protection, wear a NIOSH approved respirator.

#### Clothing:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

#### Gloves:

Employee must wear appropriate chemical-resistant, protective gloves (rubber) to prevent contact with this substance.

#### Eye protection:

The use of safety goggles is recommended.

**Emergency eye wash:** Where there is any possibility that an employee's eyes may be exposed to this substance; the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White to off-white suspended liquid. All seed treated with this product must be conspicuously coloured at the time of treatment.

**Flash point:** > 100 °C.

**pH:** 5 to 7.

**Solubility in Water:** Miscible in water.

**Density:** 1.25 g/cm<sup>3</sup> at 20°C viscosity.

**Stability:** Stable for at least 2 years under normal storage conditions.

### 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal storage conditions, decomposes above melting point. Stable in visible light. Hydrolytic DT<sub>50</sub> 454 (pH 7), 3.2 d (pH 9), Stable at pH 5. Stable to aquatic photolysis. In natural water. DT<sub>50</sub> 1-3 d.

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**Conditions to avoid:** Protect from sunlight, open flames, sparks and ignition sources. Decomposes upon heating.

Material to avoid: Strong acids and strong bases.

**Incompatibility:** Strong acids & bases, oxidizing agents.

**Storage stability:** Stable for up to 2 years when stored in a dry, cool covered warehouse in original, well-labelled containers. Store at low temperature conditions, below 50°C, preferably below 30 °C and not for prolonged periods in direct sunlight.

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition Products:** Can decompose at high temperatures and form toxic gases (Nox, CO, CO<sub>2</sub>, HCl and Chlorides).

### 11. TOXICOLOGICAL INFORMATION

**Formulation (calculated):**

**Acute oral LD<sub>50</sub>:** >500 mg/kg, <2000 mg/kg in rats.

**Acute dermal LD<sub>50</sub>:** > 4000 mg/kg in rats.

**Acute inhalation LC<sub>50</sub>:** > 1.8 mg/l /4 hours (rat).

**Eye irritation:** Mild-irritant. **Skin irritation:** Mild-irritant.

**Skin sensitization:** Non sensitization in guinea pigs.

**Chronic Toxicity:** Chlothianidin caused effects in the liver, kidney &/or ovaries following chronic exposure to high doses in mice, rats & dogs. **Carcinogenicity:** Not carcinogenic.

**Reproductive & Developmental toxicity:** Not considered a reproductive toxicant at non-maternally toxic dose levels. Developmental effects were observed in rabbits but were considered secondary to maternal toxicity.

**Neurotoxicity:** Not a neurotoxicant. **Mutagenicity:** Not genotoxic.

### 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGY:**

**Toxicity to bees:** Harmful to honeybees by direct contact, but no problems expected when not sprayed into flowering crops, or when used as a seed treatment.

**Toxicity to fish and other aquatic organisms:**

LC<sub>50</sub> (96 hours): Rainbow trout >100, carp >100, bluegill sunfish: >120 mg/l.

**Toxicity to birds:** Acute oral LD<sub>50</sub>: Bobwhite quail: > 2000 mg/kg. Dietary LC<sub>50</sub> for bobwhite quail & mallard ducks > 5200 ppm.

**Toxicity to earthworms and soil micro-organisms:** LC<sub>50</sub> (14 d): 13.2 mg/kg soil.

**Toxicity to other non-target organisms: Daphnia:** EC<sub>50</sub> (48 hour) >120 mg/l.

**Algae:** E<sub>r</sub>C<sub>50</sub> (72 h) for *Scenedesmus subspicatus* >270 mg/l.

### 13. DISPOSAL CONSIDERATION

**Pesticide disposal:** Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers.

Comply with local legislation applying to waste disposal.

**Container disposal:** Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

**TRIPLE RINSE** empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of a third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and bury in an approved dump site. Prevent contamination of food, feedstuffs, drinking water and eating utensils.

Comply with local legislation applying to waste disposal.

### 14. TRANSPORT INFORMATION

**UN NUMBER:** 3082

**Road Transport ADR/RID:**

Class: 9  
 Packaging group: III  
 Shipping name: Environmentally hazardous substance, Liquid, N.O.S  
**(Chlothianidin 600g/l)**

**Air Transport ICAO/IATA:**

Class: 9  
 Packaging group: III  
 Shipping name: Environmentally hazardous substance, Liquid, N.O.S  
**(Chlothianidin 600g/l)**

**Maritime Transport IMDG/IMO:**

Class: 9  
 Packaging group: III

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Shipping name: Environmentally hazardous  
 substance, Liquid, N.O.S  
**(Chlothianidin 600g/l)**

### 15. REGULATORY INFORMATION

**Symbol:** Xi, N  
**Indication of danger:** Irritating substance Harmful substance.  
**Risk phrases:**  
**R 20/21/22** Harmful by inhalation, in contact with skin and if swallowed.  
**R 36/38** Irritating to eyes and skin.  
**R 51/R 53** Toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.  
**Safety phrases:**  
**S 1/2** Keep locked up and out of reach children.  
**S 13** Keep away from food, drink and animal feeding stuffs.  
**S 24/25** Avoid contact with skin and eyes.  
**S 36/37/39** Wear suitable protective clothing, gloves and eye/face protection.  
**S 60** This material and its container must be disposed of as hazardous waste.  
**S 61** Avoid release to the environment. Refer to special instructions/safety data sheets.

### 16. OTHER INFORMATION

**Packaging:** Packed in 1, 5, 10, 12, 15, 20, 25, 50 and 200 litres plastic containers / bottles / drums and labelled according to South African regulations and guidelines.  
**Disclaimer:** The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

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**Compiled:** June 2015  
**Reviewed:** June 2017