



## UNIVERSAL FALGRO™ 20 SP

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT & COMPANY IDENTIFICATION

**Product Name:** FALGRO™ 20 SP  
Plant Growth Regulator  
**UN No.:** Not Regulated  
**Supplier:** Universal Crop Protection (Pty) Ltd.  
PO Box 801,  
Kempton Park, 1620, South Africa  
**Telephone:** (011) 396 2233  
**Fax:** (011) 396 4666  
**Website:** www.villacrop.co.za

**Emergency telephone:** (011) 396 2233  
**24 Hr Emergency Numbers:**  
Bateleur: 083 1233 911 or  
(Client: Villa Crop Protection) 0860 333 911  
**In case of Poisoning:**  
Red Cross Poison Information Centre: 021 689 5227  
Tygerberg Poison Information Centre: 021 931 6127  
Griffon Poison Information Centre: 082 446 8946

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Common Name:** Gibberellic acid (GA<sub>3</sub>)  
**Chemical Name:** (3S, 3aS, 4S, 4aS, 7S, 9aR, 9bR, 12S)-7, 12-dihydroxy-3- methyl-6-methylene-2-oxoperhydro-4a, 7-methano-9b, 3-propeno[1,2-b] furan-4-carboxylic acid (IUPAC)  
**CAS No.:** 77-06-5  
**Chemical Family:** Plant Growth Regulator  
**Chemical Formula:** C<sub>19</sub>H<sub>22</sub>O<sub>6</sub>  
**Use:** Plant growth hormone for promotion of certain physiological and morphological effects on specific crops.  
**Formulation:** Gibberellic acid: 200 g/kg  
Water Soluble Powder

**Hazardous Identification:** None  
**Symbol:** Xn  
**Indication of danger:** Harmful

### 3. HAZARD IDENTIFICATION

**Toxicity class:** WHO IV, EPA Table 5  
**Likely routes of exposure:** Ingestion, inhalation and skin contact.  
**Eye contact:** May cause slight eye irritation.  
**Skin contact:** Minimally toxic. May cause mild skin irritation.  
**Ingestion:** Harmful if swallowed.

**Inhalation:** May be irritating to the mucous membranes and upper respiratory tract.

### 4. FIRST AID MEASURES AND PRECAUTIONS

Reactions are not likely to occur unless the absorbed dose is extraordinary.  
Ingestion of large amounts may cause cramping, vomiting and hypertension. May cause respiratory tract irritation, coughing and chest discomfort. May cause a hard to heal rash on prolonged or repeated skin contact.

**Inhalation:**

Remove source of contamination or move victim to fresh air. Monitor for respiratory distress. Perform artificial respiration and administer oxygen if necessary. Keep person warm and at rest. Treat symptomatically and supportively. **Obtain medical advice if necessary.**

**Skin contact:**

Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Seek medical advice if necessary. Persons who become sensitized may require specialized medical management with anti-inflammatory agents.

**Eye contact:**

Immediately flush the contaminated eyes with gently flowing lukewarm water for 15 to 20 minutes, occasionally lifting the upper and lower lids. Obtain medical attention if necessary.

**Ingestion:**

Have victim rinse mouth thoroughly with water. Give water to dilute the material if victim is alert and not convulsing. **Do not induce vomiting.** If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. Qualified medical personnel should perform administration of gastric lavage or oxygen.

**Seek medical advice immediately.**

**Advice to physician:**

Treat symptomatically and supportively.

### 5. FIRE FIGHTING MEASURES

**Fire hazard and explosion hazard:**

**Fire hazard:** Not flammable.

**Flash point:** None. Not applicable.

**Combustion products:** Carbon compounds.

**Extinguishing agents:**

Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray as a fog can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Contain water used for fire fighting for later disposal.

Avoid the accumulation of polluted run-off from the site.

**Fire fighting:**



**UNIVERSAL FALGRO™ 20 SP**

**MATERIAL SAFETY DATA SHEET**

Remove spectators from surrounding area. Remove container from fire area if possible without risk. Eliminate all ignition sources in immediate area. Fight fire from maximum distance. For massive fire, use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Avoid inhaling hazardous vapours. Keep upwind.

**Personal protective equipment:**

Fire may produce irritating or poisonous vapours (toxic compounds of carbon and nitrogen), mists or other products of combustion.

Fire fighters and others that may be exposed should wear full protective impervious clothing, including gloves and eye protection, and self-contained breathing apparatus. Contact with the fumes and vapours should be avoided by staying upwind.

**6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)**

**Personal precautions:**

Avoid contact with skin and eyes. Do not inhale 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.

**Occupational spill:**

Earth all equipment used when handling the product. Do not touch or walk through spilled material. Stop leak if possible without risk. Avoid runoff of product into sewers, water systems, basements or confined areas. Thoroughly wash body areas, which come into contact with the product.

For **dry spills**, contain spillage. Shovel up and sweep up with damp earth or sand or other suitable absorbents, taking care not to raise a dust cloud. Place the material into a labeled, clean, dry container and cover for subsequent disposal. Use clean, non-sparking tools to collect absorbed material.

Do not allow the product to come in contact with water systems. Do not flush spilled material into drains. All contaminated cleaning materials should be placed in closable receptacles.

In situations where product comes in contact with water, contain contaminated water for later disposal. Do not contaminate water while cleaning equipment or disposing of wastes. Keep spectators away and upwind.

**7. HANDLING AND STORAGE REQUIREMENTS**

**Handling:**

Harmful if swallowed. Avoid contact with eyes, prolonged contact with skin, and inhalation of fumes. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing.

Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

**Storage:**

Keep out of reach of unauthorized persons, children and animals. Store in its original labeled container in shaded, well-ventilated area, away from heat, sparks and other sources of ignition. Store in dry area. 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.

**Clothing:**

Employee must wear appropriate protective (impervious) clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

**Gloves:**

Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

**Eye protection:**

The use of safety goggles is recommended.

**Emergency eyewash:** 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, off-white free flowing powder  
**Odour:** Very slightly – acidic  
**Flash point:** Not applicable. Not flammable  
**pH:** 2.77 (20% solution in water)



## UNIVERSAL FALGRO™ 20 SP

## MATERIAL SAFETY DATA SHEET

**Density:** 0.93 g/ml at 20°C  
**Solubility:** water: soluble at 20°C (all concentrations)  
**Decomposition Temperature:** -60°C

rivers, dams or any other water sources with the product or used containers.

### Package product wastes:

Emptied packaging and containers retain vapour and product residues. Observe all labeled safeguards. Packaging and containers must be completely emptied before being disposed of. Shake out thoroughly into the mixing tank and destroy the empty packaging in a safe way. Never re-use the empty packaging and containers for any other purpose.

### 10. STABILITY AND REACTIVITY

#### Stability:

Stable under normal, dry storage conditions. Stable for more than 24 months when stored in unopened packaging and kept in dry conditions at temperatures less than 32°C. Product is decomposed by strong oxidizing agents.

#### Incompatibility:

Incompatible with oxidizing materials.

#### Thermal decomposition:

When heated to decomposition it emits acrid smoke and fumes.

### 14. TRANSPORT INFORMATION

**UN NUMBER:** NOT REGULATED

**Road Transport ADR/IRD:** Not regulated

**Air Transport ICAO/IATA:** Not regulated

**Maritime Transport IMDG/IMO:** Not regulated

### 11. TOXICOLOGICAL INFORMATION

**Acute oral LD<sub>50</sub>:** > 5050 mg/kg in rats.

**Acute dermal LD<sub>50</sub>:** > 2020 mg/kg in rabbits.

**Acute inhalation LC<sub>50</sub>:** > 5,25 mg/l/hour.

#### Acute skin and eye irritation:

Slight eye irritant and mild skin irritant.

#### Dermal sensitization:

No delayed contact hypersensitivity noticed in guinea pigs

#### NOEL:

NOEL (90 days) for rats and dogs:

> 1000 mg/kg diet (6 d/w).

#### Carcinogenicity, Teratogenicity, Mutagenicity:

Not listed by IARC, NTP or OSHA as a carcinogen, mutagen, teratogen or neurotoxin. No long term effects.

### 15. REGULATORY INFORMATION

**Symbol:** Xn

**Indication of danger:** Harmful

#### Risk phrases:

**R 22** Harmful if swallowed.

**R 36/38** Irritating to eyes and skin.

#### Safety phrases:

**S 1/2** Keep locked up and out of reach of children.

**S 24/25** Avoid contact with skin and eyes.

**S 36/37/39** Wear suitable protective clothing, gloves and eye/face protection.

**S 46** If swallowed, seek medical advice immediately and show this container and label.

### 12. ECOLOGICAL INFORMATION

#### Biodegradation:

Degrades rapidly under biological conditions.

#### ECOTOXICOLOGY:

No risks to the environment are expected from use of gibberellic acids, because they do not harm animals or plants in the amounts used, they act as plant growth enhancers and they are naturally broken down in the environment.

Gibberellic acids and related isomers have been classified as biochemical pesticides.

### 16. OTHER INFORMATION

#### Packing and Labeling

Packed in 12.5 g water-soluble sachets packed 12 x 12.5g in 3 layer paper cartons and labeled 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.

### 13. DISPOSAL CONSIDERATION

#### Pesticide disposal

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product that cannot be reused or reprocessed should be disposed of in a landfill approved for pesticide disposal. Do not contaminate



**UNIVERSAL Crop Protection (Pty) Ltd**  
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