

UNIVERSAL FALGRO® TABLETS

MATERIAL SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: FALGRO® TABLETS
 Plant Growth Regulator

UN No.: Not Regulated

Company: 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

Emergency telephone numbers:

24 Hr Transport / Spill emergency no:

Envirosure. +27 31 205 4918
 (Hazcall24) +27 86 044 4411
 (Client: Villa Crop Protection)

Griffon Poison Information Centre +27 82 446 8946
 (Client: Villa Crop Protection)

Poisoning Emergency telephone numbers:

Griffon Poison Information Centre +27 82 446 8946
 Poisons Information Centre +27 861 555 777

Villa Crop Protection Emergency number:

National Safety, Health and Environmental Manager:
 +27 63 698 0668

2. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name: Gibberellic acid (GA₃)
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: C₁₉H₂₂O₆
Use: Plant growth hormone for promotion of certain physiological and morphological effects on specific crops.

Formulation: Gibberellic acid:

204 g/kg (1 tablet = 1 g a.i. = 1 ppm)

Net mass per Tablet: **4.9 g x 10 TABLETS**

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,

UNIVERSAL FALGRO® TABLETS

MATERIAL SAFETY DATA SHEET

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.

Firefighting: 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 tablet.

Odour: Very slightly – acidic.

Flash point: Not applicable. Not flammable.

UNIVERSAL FALGRO® TABLETS

MATERIAL SAFETY DATA SHEET

Solubility: In water: soluble at 20 °C (all concentrations). Solution time of tablet in standard water at 25 °C is 6 minutes.

Decomposition Temperature: ~60 °C.

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. Strong oxidizing agents decompose the product. Tablets will effervesce on contact with water or prolonged contact with humid air to release CO₂.

Incompatibility: Incompatible with oxidizing materials.

Thermal decomposition: When heated to decomposition it emits acrid smoke and fumes.

11. TOXICOLOGICAL INFORMATION

Acute oral LD₅₀: > 5050 mg/kg in rats.

Acute dermal LD₅₀: > 2020 mg/kg in rabbits.

Acute inhalation LC₅₀: > 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.

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.

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 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

FALGRO® TABLETS

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.

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.

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.

16. OTHER INFORMATION

Packing and Labeling: Packed in water-soluble sachets, packed 10 x 4.9 g 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.

END OF DOCUMENT

Compiled: September 1999

Reviewed: March 2019

Revision no.: (2)

Next revision date: March 2024

For detailed information on revisions, contact the Registration holder.



Subject: *FALGRO® TABLETS*
Document no: *048UM*
Effective Date: *September 1999*
Revision no: *March 2019 (2)*
Product Code: *GGIBTAB/FU*

UNIVERSAL FALGRO® TABLETS

MATERIAL SAFETY DATA SHEET