

# PERLAN®

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** PERLAN®  
**Other identifier:** Gibberellic acid + 6-benzyl-adenine  
**Recommended use:** Plant Growth regulator  
**Restrictions on use:** Agriculture

**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:**  
 (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

## 2. HAZARDS IDENTIFICATION

**The most important adverse effects:**  
**Physiochemical effects:** None known.  
**Human health effects:** None known.  
**Label elements:** No label elements.  
**Signal word:** No signal word.  
**Hazard statement:** No hazard statements.  
**Precautionary statements:** No precautionary statements.  
**Special labelling of certain mixtures:** None known.  
**Other hazards:** None known.  
**Toxicity:**  
 Classification according to GHS: Unclassified.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/Mixture:** Mixture  
**Composition:** No hazardous components within this mixture.

## 4. FIRST AID MEASURES AND PRECAUTIONS

Reactions are not likely to occur unless the absorbed dose is extraordinary.  
**Inhalation:** Remove source of contamination or move person to fresh air. Keep person warm and at rest. Treat symptomatically and supportively as and when required.

**Skin:** 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 sensitised may require specialized medical attention.  
**Eyes:** 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. **Do not induce vomiting.** Give plenty of water or milk to drink (1 to 2 glasses). Seek medical advice if person feels unwell.  
**Anticipated acute effects:** No information available.  
**Anticipated delayed effects:** No information available.  
**Most important symptoms / effects:** None known.  
**Advice to physicians:** There is no antidote. Treat supportively and symptomatically.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Use carbon dioxide, dry chemical powder, water fog or foam to extinguish fire. Water spray can be used for cooling of containers exposed to fire but avoid water coming in contact with the product. Apply water as a fine mist or fog.  
**Unsuitable Extinguishing Media:** No information.  
**Specific hazards:** No information.  
**Special fire-fighting procedures:** Isolate the fire area and evacuate downwind. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Contain fire control agents for later disposal. Use a recommended extinguishing agent for the type of surrounding fire.  
**Personal protective equipment:** Fire-fighters and others that may be exposed should wear full protective clothing and positive pressure breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** It is advised to avoid contact with skin and eyes. Do not breathe in spray, fumes or mists.  
**Protective equipment:** For personal protection see Section 8.  
**Emergency procedures:** Keep spectators away. Isolate hazard area and do not touch or walk through spilled material. Stop leak if you can do so without risk.  
**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.  
**Methods and Materials for Containment:** Dike far ahead of liquid spills.

## PERLAN®

## SAFETY DATA SHEET

**Methods and Materials for Clean-up:** Cover spill with sand or suitable non-combustible absorbent material, sweep up and place into sealable, labelled containers for subsequent disposal. Remove contaminated material to safe location for subsequent disposal.

Wash area with detergent and water and follow with clean water rinse. Do not allow spill to contaminate water supplies.

### 7. HANDLING AND STORAGE

**Handling:**

**Precautions for safe handling:** Handle with the care and caution applicable to crop protection chemicals. Avoid spillage. Avoid contact with eyes and skin and inhalation of fumes. Avoid exposure to spray. Use with adequate ventilation. Wash thoroughly after use. 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.

**General occupational hygiene:** Wash hands before eating, drinking, chewing gum, smoking or using the toilet. Operators should change and wash clothing daily.

**Storage:**

**Conditions for safe storage:** Store in a dry, cool covered warehouse in original, well-labelled containers. Store away from oxidising agents. Store away from food, feedstuffs, fertilisers, seed and agricultural chemicals. Keep away from children and animals. Local regulations should be complied with.

### 8. EXPOSURE CONTROL AND/ PERSONAL PROTECTION

**Permissible concentration:**

None known.

**Engineering controls:** Provide general or local exhaust ventilation systems. 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:**

**Respiratory protection:** No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask.

**Hand protection:** Wear suitable protective gloves.

**Eye protection:** Employee must wear splash-proof safety goggles or face-shield to prevent contact with this substance.

**Skin and body protection:** Wear suitable protective clothing. Contaminated clothing should be laundered before reuse.

**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:** Colourless liquid.

**Odour:** Odourless.

**Odour threshold:** No information.

**pH (1% aqueous solution):** 4 – 5.

**Melting point:** Not applicable.

**Freezing point:** Not available.

**Boiling point:** 187 °C.

**Flash point:** > 100 °C.

**Flammability:** Not flammable.

**Upper / lower explosion limits:** Not applicable.

**Vapour pressure (mm Hg):** 29.3 Pa @ 20 °C (solvent) or 5.5 x 10<sup>-6</sup> Pa (6-BA).

**Relative vapour density:** Not available.

**Density / relative density:** 1.043 at 20 °C.

**Solubility:** Soluble in water.

**n-octanol / water partition coefficient:** -0.92 log Pow (solvent)

**Auto-ignition temperature:** > 100 °C.

**Decomposition temperature:** Not available.

**Viscosity:** 66.5 cP at 20 °C (kinematic)

### 10. STABILITY AND REACTIVITY

**Chemical stability:** The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.

**Reactivity:** None known.

**Possibility of hazardous reactions:** None known.

**Conditions to avoid:** Keep away from heat and sources of ignition.

**Incompatible materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Decomposition products may include toxic and irritant fumes.

### 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:**

**Oral LD<sub>50</sub>:** > 2000 mg/kg in rats.

**Dermal LD<sub>50</sub>:** > 2000 mg/kg in rats.

**Inhalation LD<sub>50</sub>:** > 5.21 mg/l in rats.

**Skin irritation / corrosion:** Not a skin irritant.

**Eye damage / irritation:** Not an eye irritant.

**Skin sensitization:** Not a skin sensitizer.

**Respiratory sensitization:** Not a respiratory sensitizer.

## PERLAN®

## SAFETY DATA SHEET

**Reproductive cell mutagenicity:** No evidence of mutagenic effects.

**Carcinogenicity:** No evidence of carcinogenic effects.

**Reproductive toxicity:** No evidence of reproductive effects.

**Specific target organ toxicity – single exposure:** Not calculated.

**Specific target organ toxicity – repeated exposure:** Not calculated.

**Aspiration hazard:** Not calculated.

**Chronic Effects:** None known.

**POTENTIAL ADVERSE EFFECTS:**

None known.

**Other information:**

None known.

### 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGY DATA:**

**Information on formulation:**

LC <sub>50</sub>	Fish	(96 h)	> 100 mg/ℓ
EC <sub>50</sub>	Daphnia magna	(48h)	1068 mg/ℓ
EC <sub>50</sub>	Algae	(72h)	284.9 mg/ℓ
EC <sub>50</sub>	Lemna	(72h)	254.7 mg/ℓ
LD <sub>50</sub>	Bee	(oral)	> 82 µg/bee
LD <sub>50</sub>	Bee	(contact)	> 100 µg/bee

**Information on active ingredient (6-BA)**

LC <sub>50</sub>	Bird	1599 mg/kg
------------------	------	------------

**ENVIRONMENTAL EFFECTS:**

**Plants:** No information available.

**Persistence and degradability:** Rapidly biodegradable.

**Bio-accumulative potential:** No information available.

**Mobility in soil:** No information available.

**Other adverse effects:** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste:** Open dumping or burning of this pesticide is prohibited. 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. The product may be taken to a registered waste disposal site or incineration plant.

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

**TRIPLE RINSE THE EMPTY CONTAINER AS FOLLOWS:** Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty

container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler [www.croplife.co.za](http://www.croplife.co.za). Do not bury, burn, or donate the container to any other parties that may use it as a container for food or beverages.

### 14. TRANSPORT INFORMATION

Not classed i.e. considered non-hazardous material according to UN Orange Book and international transport codes e.g. RID (rail), ADR (road) and IMDG (sea)

**Special/Environmental Precautions:** Wedge drums tightly to avoid movement.

**Transport in bulk** (according to MARPOL 73/78, Annex II and the IBC code): Not available.

### 15. REGULATORY INFORMATION

**Safety, health and environmental regulations / legislation for the mixture:**

OHS 1993 Regulations for Hazardous Chemical Substances.

**Relevant information regarding restrictions:** None.

**EU regulation:** Regulation EC1272/2008 (EU-GHS/CLP)

**Other national regulations:** None.

**Chemical Safety Assessment carried out?** No

### 16. OTHER INFORMATION

**Packing and Labelling:** The product is packed in HDPE fluorinated 1, 5, 10, 20, 25 litres plastic containers and labelled according to South African regulations and guidelines.

**Other hazard statements, abbreviations and explanations:**

**IATA:** International Air Transport Association.

**IBC:** International Bulk Chemical.

**ICAO:** International Civil Aviation Organization.

**IMDG:** International Maritime Dangerous Goods

**IMO:** International Maritime Organization.

**LD<sub>50</sub> value:** The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.

**TWA:** Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.

**ST/STEL:** Short-term exposure limits.

**Disclaimer:** The information on this sheet is not a specification; it does not guarantee specific properties. The

## **PERLAN®**

## **SAFETY DATA SHEET**

information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and 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:** August 2022  
**Reviewed:** August 2022  
**Revision no.:** (1)  
**Next revision:** August 2027

For detailed information on revisions, contact the Registration holder.