SAFETY DATA SHEET
SAHARA

Reg. No. / Nr L11905 Act No. 36 of 1947 / Wet Nr 36 van 1947

Section 1. Identification of the material and the supplier

Product:	**SAHARA**
Product Use:	Herbicide
Restriction of Use:	Refer to Section 15
Supplier:	**Agritech Bioscience (Pty) Ltd. t/a Carabiner** P.O. Box 1224 Isando, 1600 South Africa www.carabiner.co.za
Emergency No:	POISON INFORMATION HELPLINE 0861 555 777 POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 TYGERBERG 021 931 6129 RED CROSS 021 689 5227 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE 082 446 8946
Date of SDS Preparation:	05 February 2026

Section 2. Hazards Identification

Classification of the substance or mixture
Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Serious Eye Damage Category 1; H318
Short term (Acute) Aquatic Hazard Category 3; H402
Long term (Chronic) Aquatic Hazard Category 3; H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

Label elements:
Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Pictograms

Signal Word: **DANGER**

Hazard statement(s)
H318: Causes serious eye damage.
H402: Harmful to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

General:
P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read carefully and follow all instructions.

Prevention:
P264 + P265 - Wash hands thoroughly after handling. Do not touch eyes.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response:
P305 + P354 + P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P317 - Get medical help.

Disposal:
P501 - Dispose of contents/container in accordance with local / regional / national / international regulations.

Supplemental Hazard Statements: none

2.3 Other

Other hazards
No other hazards known

Section 3. Composition / Information on Hazardous Ingredients

Mixture
Suspension concentrate
Imazapyr 240 g/L

Globally Harmonised System, EU (GHS) and according to regulation EC No 1272/2008 [CLP]

Ingredients	Concentration of hazardous ingredient in composition	CAS Number	Classification
Imazapyr-isopropylammonium	>26-<28%	81510-83-0	Eye Irrit. Cat. 2; H319 Aquatic Chronic Cat. 3; H412
Ethylene glycol	>1-<10%	107-21-1	Acute Tox. Oral Cat. 4; H302
Surfactant containing Alcohols, C12-14, ethoxylated	>1-<10%	-	Acute Tox. Oral Cat. 4; H302 Serious eye damage Cat. 1; H318 Aquatic Acute Cat. 2; H401 Aquatic Chronic Cat. 3; H412

Section 4 First Aid Measures

If medical advice is needed, have product container or label at hand. Provide medical personnel with the container, label or safety data sheet (SDS) when seeking medical attention.

General Information: Never give anything by mouth to an unconscious person. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Routes of Exposure:

If in Eyes	Flush eyes immediately with plenty of clean, room temperature water for at least 15 minutes holding eyelids open. Remove contact lenses if present, after the first 1-2 minutes, then continue rinsing eyes. **Seek medical attention immediately.**
If on Skin	Contaminated clothing and shoes should immediately be removed, and the body, clothes and shoes should be flushed with large amounts of water. Wash thoroughly with soap and water (including hair, skin, and fingernails). Wash contaminated clothing before re-use. Persons providing first aid must wear gloves to avoid self-contamination. **Seek medical attention.**
If Swallowed	Rinse mouth immediately with clean water and have the patient sip a glass of water if the patient is alert and able. Do NOT induce vomiting unless instructed to do so by a medical professional. Never induce vomiting or give anything by mouth to a victim who is unconscious or is having convulsions. **Seek medical attention.**
If Inhaled	Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control centre or doctor for treatment advice. **Seek medical attention**.

Most important symptoms and effects, both acute and delayed
Symptoms: No known symptoms.

Treatment:
Treat according to symptoms (decontamination, vital functions). There is no known specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control centre or doctor, or going for treatment.

Section 5. Fire Fighting Measures

Hazards from products	None known.
Suitable Extinguishing media	Fine water spray, alcohol-resistant foam, dry chemical, carbon dioxide. Do not use a water jet due to contamination/spreading fog.

Recommended protective clothing & Precautions for firefighters	Wear SCBA and chemical-protective clothing which includes fire-fighting helmet, coat, trousers, boots, and gloves. Self-contained breathing apparatus is required. During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Remove spectators from surrounding area and isolate the fire area. 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. Do not allow extinguishing medium to contact container contents. Remove undamaged containers from fire area if it is safe to do so. Keep upwind and away from low areas where the fumes can accumulate. Eliminate ignition sources. Avoid inhaling hazardous vapours and fumes from burning materials. 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. Do not scatter the material. Dispose of extinguishing agent and spillage in a safe way at a later stage. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. Contain run-off water with, for example, temporary earth barriers. **Additional provisions:** Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. In the event of a fire, wear full protective clothing and self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode. **Personal protective equipment:** Wear appropriate safety clothing and eye/face protection. Do not inhale vapour or spray. Avoid contact with spilled product or contaminated surfaces. Avoid contact with skin and eyes. Avoid inhalation of the spray or fumes. **For personal protection see Section 8.**

Section 6. Accidental Release Measures

Personal precautions:
All personnel handling this material must be thoroughly trained on how to handle spills and releases. Wear appropriate safety clothing and eye/face protection. Do not inhale vapour or spray. Avoid contact with spilled product or contaminated surfaces. For personal protection see section 8. Isolate the area. Keep unnecessary and unprotected personnel from entering the area. No smoking in the area.

Environmental precautions:
In accordance with local and national regulations. Do not contaminate water, food, or feed by disposal. Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Contain spillage.

Spill and Disposal procedures:
Cleaning procedure:
Do not eat, drink or smoke during the clean-up process. Clear area of unprotected personnel and ensure adequate ventilation. Eliminate all sources of flames and sparks. Ground and bond all containers and handling equipment. Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately.

Small spills: Absorb with materials such as sand or other non-reactive absorbent materials. Sweep up. Collect in suitable and properly labelled containers. Rinse spill area with small amount of soapy water. Contain and absorb the rinsate with inert absorbents and place into the same disposal container. Area can be washed with water to remove the last trace residue.

Large spills: Contact the emergency contact number for clean-up assistance. Collect in suitable, labelled and sealable containers for later disposals according to regulations. Dispose of absorbed materials according to local regulations. Collect waste into suitable containers, which can be labelled and sealed. Clean contaminated floors and objects thoroughly with water and a detergent, while observing environmental regulations. Incinerate or take to a special waste disposal site according to local regulations. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to over pressurization of the container. Keep in suitable, closed containers for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). See Section 13, Disposal Considerations, for additional information.

Waste Disposal: In accordance with local and national regulations. Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities. Contain spillage, soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal. Retain and dispose of contaminated wash water.

Container Disposal: Containers and packages must be completely emptied before disposal. Rinse empty container three times with a volume of water equal to a minimum of 30% of that of the container. Add the rinsings to the contents of the spray tank before destroying the empty container. Destroy the empty container by perforation and flattening and do not use for any other purpose. Store appropriately until it can be taken to a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations for disposal. Empty containers and product should not be burnt.
DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.

Reference to other sections
Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

Section 7. Handling and Storage

Precautions for Handling:
KEEP OUT OF SIGHT AND REACH OF CHILDREN and animals. Do not smoke near handling and storage area. Avoid breathing vapour or mist. Keep away from food, feed and eating utensils. Avoid contact with eyes, skin and clothing. Do not swallow. Keep the container closed. Use with adequate ventilation. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. After work, rinse gloves and remove protective equipment. Wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, or using the toilet. Wash contaminated clothing before re-use and separate from household laundry.

Precautions for Storage:
Store in original container only in a well-ventilated, cool, dry, secure area away from children, foods, animal feeds, and water supplies. Protect from heat, moisture and direct sunlight. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers. Store in accordance with the particular national regulations.
Protect from temperatures below: -10 °C. Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.
Protect from temperatures above: 40 °C. Changes in the properties of the product may occur if substance/product is stored above the indicated temperature for extended periods of time.

Specific end use(s): Use only according to the label.

Section 8 Exposure Controls / Personal Protection

Occupational exposure limits:

Component	Value type (Form of exposure)	Control parameters / permissible concentration	Basis
Ethylene glycol (vapour)	8 hr TWA	52 mg/m3 (20 ppm)	Safe Work Australia Workplace Exposure Standards for Airborne Contaminants
Ethylene glycol (vapour)	15 min STEL	104 mg/m3	Safe Work Australia Workplace Exposure Standards for Airborne Contaminants
Ethylene glycol (particulate)	SK 8hr TWA	10 mg/m3	Safe Work Australia Workplace Exposure Standards for Airborne Contaminants

Engineering Controls / Industrial Hygiene
Comply with occupational safety, environmental, fire and other applicable regulations.

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 Protection Equipment

Eyes	Safety goggles with side-shields which are compliant with EN 166 or equivalent. 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.
Hands	Use suitable chemical resistant safety gloves which are compliant with EN 374 or equivalent. Protective Index: 6, corresponding to >480 minutes of permeation time according to EN 374.

	Suitable material: e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm). Contaminated gloves should be washed. Gloves should be disposed of when contaminated on the inside, perforated or contamination on the outside cannot be removed.
Skin	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure. Decontaminate contaminated clothing, remove and dispose of in accordance with the manufacturer's instructions.
Respiratory	If the product is used in dusty or confined conditions, a mask or respirator suitable for protection from dusts and mists of pesticides is adequate. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.
General	Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use. Wash hands and face before breaks and after work. Suitable or appropriate respiratory and eye protection should also be worn. Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating. When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Clear light yellow
Odour	Mild amine odour
Odour Threshold	No data available
pH	7-9 (1% aqueous dilution)
Boiling/Melting Point	No data available
Freezing Point	No data available
Flash Point	No data available
Flammability	Not flammable
Upper and Lower Explosive Limits	No data available
Vapour Pressure	No data available
Vapour Density	No data available
Density	1.09
Water Solubility	Soluble in water
Partition Coefficient:	Imazapyr: 0.11
Ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Particle Characteristics	No data available
Surface tension	No data available

Section 10. Stability and Reactivity

Stability of substance	Stable under normal conditions. Stable for 24 months. Store below 40°C, preferably below 30°C, and not for prolonged periods in direct sunlight.
Possibility of hazardous reactions	None known.

Conditions to avoid	Excessive heat, freezing, sunlight, open flames and sources of ignition.
Incompatible materials	Oxidising and reducing agents. Store only in the original container.
Hazardous decomposition products	This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide and if combustion is incomplete, carbon monoxide, and smoke are liberated. Nitrogen and its compound and under circumstances, oxides of nitrogen are released. Occasionally hydrogen cyanide gas in reducing atmospheres. Carbon monoxide poisoning produces headaches, weakness, nausea, dizziness, confusion, dimness of vision, distance of judgement and unconsciousness followed by coma and death.

Section 11 Toxicological Information

Acute Effects:

Oral	GHS: Not classified
Dermal	GHS: Not classified
Inhalation	GHS: Not classified
Eye	GHS: Category 1
Skin	GHS: Not classified

Chronic Effects:

Carcinogenicity	GHS: Not classified
Reproductive Toxicity	GHS: Not classified
Germ Cell Mutagenicity	GHS: Not classified
Aspiration	GHS: Not classified
STOT/SE	GHS: Not classified
STOT/RE	GHS: Not classified

Section 12. Ecotoxicological Information

Ecological effects information	**Aquatic acute toxicity**: **Imazapyr:** LC_{50} (96 h) for rainbow trout >100 mg/L. LC_{50} (96 h) for channel catfish >100 mg/L. *Daphnia magna*: LC_{50} (48 h) >100 mg/L. Algae: EC_{50} (120 h) or *Selenastrum* 71, *Anabaen* 11.7, *Skeletonema* 85.5, *Navicula* >59 mg/L. GHS: Not classified **Formulated product:** GHS: Aquatic Acute Category 3 **Aquatic chronic toxicity**: **Imazapyr:** Chronic 28 day NOEC (mg l^{-1}): 43.1 Aquatic invertebrates - Chronic 21 day NOEC (mg l^{-1}): > 97.1 GHS: Aquatic Chronic Category 3

	Formulated product: GHS: Aquatic Chronic Category 3 **Imazapyr:** **Birds:** Dietary LC_{50} (8 d) for bobwhite quail and mallard ducks >5000 mg/kg diet. **Earthworms:** Acute 14 day LC_{50} (mg kg^{-1}): 133. **Bees:** Contact acute LD_{50} (worst case from 24, 48 and 72 hour values - µg bee^{-1}): >100 (contact). Oral acute LD_{50} (worst case from 24, 48 and 72 hour values - µg bee^{-1}): 25.
Persistence and degradability	**Imazapyr:** Aqueous hydrolysis DT_{50} (days) at 20 °C and pH 7: 30 Hydrolysis is not expected to be an important environmental fate process since this compound lacks functional groups that hydrolyse under environmental conditions. Aqueous photolysis DT_{50} (days) at pH 7: 2.1 Imazapyr may be broken down by exposure to sunlight. Soil microorganisms contribute to the break-down of imazapyr. Very little imazapyr is lost by evaporation. **Formulated product:** No data available
Bioaccumulation	**Imazapyr:** The Bioconcentration Factor of 2.54 and the partition coefficient of 0.11 suggest that the potential for bioconcentration in aquatic organisms is low.
Mobility in Soil	Moderately mobile
Other adverse effects	This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Precautions:	Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:
In accordance with local and national regulations. If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

This product and its container must be disposed of by a waste treatment facility authorised to destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations. Do not dispose into, or allow contact with, municipal sewerage systems or open water bodies. Do not bury.

Contaminated packaging:
Containers and packages must be completely emptied before disposal.

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. Destroy the triple rinsed container by perforation and flattening and do not use for any other purpose. Store appropriately until it can be disposed of via an approved collector or recycler authorised to recycle or destroy waste in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and the relevant waste management regulations. Empty containers and product should not be burnt. Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

Special precautions during disposal:
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.

Section 14 Transport Information

Rail/road (RID/ADR):

Proper shipping name	Not regulated
UN number	-
Class	-
Packing group	-
Environm. Haz. Mark	-

Sea (IMDG code):

Proper shipping name	Not regulated
UN number	-
Class	-
Packing group	-
Marine pollutant	-

Air (ICAO/IATA):

Proper shipping name	Not regulated
UN number	-
Class	-
Packing group	-
Environm. Haz. Mark	-

Section 15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment
For this product a chemical safety assessment was not carried out.

Section 16 Other Information

Full text of H-Statements referred to under sections 2 and 3.

H318: Causes serious eye damage.
H402: Harmful to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

The information herein is given in good faith, but no warranty, express or implied is made.
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