

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Gladiator 160 ME

Identified uses: Selective Systemic herbicide for the control of invasive alien plant species as specified on label

COMPANY IDENTIFICATION

Future Farm and Forest Services and Supplies (Pty) Ltd
Company Registration No.: 1998/014639/07
PO Box 98165, Sloane Park,
Sandton,
2152
South Africa

Tel & Fax: (011) 463 5842
Email: futfarm@ananzi.co.za

Emergency Telephone Numbers

24 hour emergency contact: 086 155 5777 [Poison Information Helpline]

Poisonings: 082 446 8946 [Griffon Poison Centre]

2. HAZARDS IDENTIFICATION

Potential health effects: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

Eye: May cause severe eye irritation with corneal injury, which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Skin: Prolonged contact may cause slight skin irritation with local redness. May cause drying and flaking of the skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Inhalation: Prolonged exposure is not expected to cause adverse effects. Mist may cause irritation of upper respiratory tract (nose and throat) and lungs.

HAZARD PICTOGRAMS



3. COMPOSITION/ INFORMATION ON INGREDIENTS

Formulation: Picloram TIPA salt 80 g/l & Fluroxypyr MHE 80 g/l

Material	CAS number	Concentration
Fluroxypyr – Methyl heptyl ester	81406-37-3	10.65%
Picloram – Triisoproponalamin salt	6753-47-5	13.24%
Other Inerts		Up to 100%

4. FIRST AID MEASURES

- Eye:** Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.
- Skin:** Wash skin with plenty of water.
- Ingestion:** No emergency medical treatment necessary.
- Inhalation:** Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

5. FIRE FIGHTING MEASURES

- Extinguishing media:** Foam, CO2, Dry chemical
- Fire and explosion hazards:** Foam fire extinguishing system is preferred because uncontained water can spread possible contamination. Toxic irritating gases may be formed under fire conditions.
- Fire-fighting equipment:** Use positive-pressure, self-contained breathing apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES

- Personal Protection:** Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean-up process. Wear protective equipment including rubber gloves, and eye protection.
Keep unprotected persons away.
- Environmental Protection:** Take precautions to ensure product does not contaminate the ground or enter the drainage system.
- Collection:** Mix with vermiculite or proprietary absorbent material and transfer to sealed containers for disposal. Collect and store in properly labelled drums for safe disposal. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc., is unavoidable, warn the local water authority.

7. HANDLING AND STORAGE

- Handling:** Keep out of reach of children. Avoid contact with eyes and skin. Do not inhale spray mist. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Storage: Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Do not store food, beverages or tobacco products in the storage area. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROL/ PERSONAL PROTECTION

- Engineering Control:** Provide general and/ or local exhaust ventilation to control airborne levels below the exposure guidelines.
- Eye/ Face Protection:** Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- Skin:** Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.
- Ingestion:** Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
- Inhalation:** Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance:** Amber liquid
- Density:** 1.05-1.09 g/cm³ at 20°C
- Flash Point:** > 100°C
- Explosive Properties:** not explosive
- Oxidising Properties:** not oxidising
- Water Solubility:** Emulsifiable in water
- Boiling Point/ Range:** 100 °C

10. STABILITY AND REACTIVITY

- Chemical Stability:** Stable under normal handling and storage conditions.
- Conditions to avoid:** Store under cool, dry conditions. Avoid elevated temperatures and direct sunlight.
- Incompatibility:** None known.
- Hazardous decomposition products:** In a fire, hydrogen chloride and nitrogen oxides will be formed.
- Hazardous polymerization:** Not known to occur.

11. TOXICOLOGICAL INFORMATION

- Acute Oral LD50:** >5000 mg/kg in rats.
- Acute Dermal LD50:** > 5000 mg/kg in rats.
- Acute Inhalation LC50:** > 5.56 mg/l for 4 hours in rats.
- Acute Skin Irritation:** May cause skin irritation.
- Acute Eye Irritation:** May cause eye irritation. May cause corneal injury.
- Skin Sensitization:** Did not cause allergic skin reactions when tested in guinea pigs.

- Cancer Information:** Contains naphthalene, which has caused cancer in some laboratory animals.
- Teratology (Birth Defects):** Birth defects are unlikely. Exposures having no adverse effects on the mother should have no effect on the fetus.
- Reproductive Effects:** In animal studies on the components tested, did not interfere with reproduction.
- Mutagenicity:** For the components tested in-vitro and animal mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION

- Movement & Partitioning:** Based largely or completely on information for fluroxypyr MHE and triisoproponalamine. Bioconcentration potential is low (BCF is <100 or Log Pow <3). Based largely or completely on information for Picloram TIPA salt. Bioconcentration potential is moderate (BCF is between 100 and 3000 or Log Pow between 3 and 5). Based largely or completely on information for the solvent. Bioconcentration potential is high (BCF is >3000 or Log Pow between 5 and 7).
- Degradation and Persistence:** Based largely or completely on information for fluroxypyr MHE and Picloram TIPA salt. No relevant information found. Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
- Ecotoxicology:** Material is practically non-toxic to aquatic organisms on acute basis (LC50 or EC50 is >100 mg/l in the most sensitive species tested). Based largely or completely on information for Picloram TIPA salt and triisoproponalamine. Material is slightly toxic to aquatic organisms on an acute basis (LC50 or EC50 is between 10 and 100 mg/l in the most sensitive species tested).

13. DISPOSAL CONSIDERATIONS

Triple or preferably pressure rinse containers before disposal. Add rinse water to the mixing tank. Do not dispose of undiluted chemical on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty container in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation, and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

- UN No.:** 3082
- Class:** 9
- Packing group:** III
- ADR/ IRD-Shipping name:** Environmentally hazardous substance, liquid, n.o.s. (contains fluroxypyr, picloram)

15. REGULATORY INFORMATION

- Symbol:** N
- Indication of Danger:** Dangerous for the Environment
- Risk Phrases:** R52/53 – Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety phrases: S2 – Keep out of reach of children
S36/37 – Wear suitable protective clothing and gloves
S61 – Avoid release to the environment. Refer to special instructions/ safety data sheets

16. OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.