



SAFETY DATA SHEET

G-FOSINATE

Date of Issue : 2nd Jan 2023

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name	:	G-FOSINATE
Use of the Substance/Mixture	:	Herbicide / Agriculture Use
Formulation	:	Soluble Liquid (SL)
Company Identification	:	G-PLANTER SDN. BHD. (200401005370) No. 11 A, Jalan Mahsuri, Kawasan Perindustrian Kluang 1, 86000, Kluang, Johor, Malaysia.
Office Phone	:	+ 6 07-7878488
Fax No.	:	+ 6 07-7878480
Emergency Telephone No.	:	999

SECTION 2 – HAZARD IDENTIFICATION

Emergency Overview: Harmful if swallowed. Causes slight eye irritation. Toxic to fish and aquatic invertebrates.

Health Hazards :

- 1) Eyes : A slight eye irritant.
- 2) Skin: A harmful skin irritant.
- 3) Ingestion: Harmful if swallowed
- 4) Inhalation: Harmful if inhaled
- 5) Environment Hazards: Glufosinate-ammonium is very soluble in water and is hydrolytically and photolytically stable

Signs and Symptoms :

Nausea, vomiting, diarrhea, increased salivation, drowsiness, tremors, convulsions, respiratory depression, cardiac arrhythmia, decreased blood pressure, drowsiness and/or loss of consciousness. These symptoms may be delayed by up to 48 hours after exposure.

SECTION 3 – COMPOSITION /INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	Concentration(% by weight)
Glufosinate-ammonium	77182-82-2	13.5
Inert ingredients	-	86.5



SAFETY DATA SHEET

G-FOSINATE

Date of Issue : 2nd Jan 2023

SECTION 4 – FIRST AID MEASURES

First aid:

- 1) **Ingestion:** Rinse mouth thoroughly with plenty of water. Do not induce vomiting. Get medical attention immediately.
- 2) **Eye Contact:** Flush eyes with plenty of water. Get medical attention if irritation persists.
- 3) **Skin Contact:** Remove contaminated clothing. Wash skin immediately with plenty of soap and water. Get medical attention.
- 4) **Inhalation:** Remove individual to fresh air. Get medical attention if breathing difficulty develops.

Notes to Physician: Symptoms may be delayed by up to 48 hours following ingestion. Thus, a patient ingesting undiluted product treated as outlined below. Treatment should be symptomatic and supportive.

SECTION 5 – FIRE FIGHTING MEASURES

Hazard Characteristic:

Low toxicity, Herbicides.

Hazardous Combustion Products: In a fire, irritant and toxic fumes containing oxides of carbon and nitrogen, hydrogen chloride, combustion products sulphur dioxide and other toxic substances may be generated.

Extinguishing medium:

Small fire: Dry chemical, foam or carbon dioxide (CO₂).

Large fire : Foam, water, move containers from fire area if without risk. Cool containers with water from maximum distance.

Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Extinguish only if flow can be stopped. Use flooding amounts of water as fog. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors.



SAFETY DATA SHEET

G-FOSINATE

Date of Issue : 2nd Jan 2023

SECTION 6 – ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Small Spills: Absorb with an inert absorbent material such as granular clay, saw dust, or pet litter. Sweep up carefully while avoiding the formation of a dust cloud. Place in an approved chemical waste container for disposal. 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. Do not allow water to contaminate water supplies or sewers.

Large Spills: Eliminate all ignition sources. Stop leak if you can do so without coming into contact with spilled material. Dike far ahead of liquid spill for later disposal. All equipment used to clean up spill should be grounded. Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs. Contact Aventis for further assistance if necessary.

SECTION 7 – HANDLING AND STORAGE

Handling: Keep out of reach of children. Harmful if absorbed by skin contact or if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Avoid breathing vapour or spray. If product in eyes, wash it out immediately with water. If product on skin, immediately wash area with soap and water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Store: Do not contaminate water, food or feed by storage or disposal. Do not store near heat or open flame. Store this product in its original container. Store product in a secure storage area.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls: Control airborne concentrations below the appropriate exposure guideline (see below for any applicable OSHA/ACGIH Exposure Limits). Local exhaust ventilation may be necessary.

Respiratory protection: Ensure good ventilation. If not adequate, use a chemical cartridge-type respirator approved by the National Institute of Occupational Health and Safety.

Eye protection: Wear safety glasses, splash goggles or face shield.



SAFETY DATA SHEET

G-FOSINATE

Date of Issue : 2nd Jan 2023

Physical protection: Wear chemical-resistant gloves (Neoprene, Nitrile, PVC) and other protective clothing to avoid skin contact.

Other protective: Eye wash facility and safety shower should be available. The following personal protective equipment (PPE) must be worn when using product or upon early entry into treated areas during the Restricted Entry Interval (REI):

- Long sleeved shirt and long pants; or Coveralls (required for REI only)
- Chemical-resistant gloves
- Shoes and socks
- Protective eyewear
- Chemical-resistant apron during mixing and loading

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light-blue homogenous liquid

Odor: A slightly pungent odour

Boiling point: Not applicable

Melting point: Not applicable

Vapor Pressure: Not available

Specific gravity: 1.06 g/cm³ ±0.05 (20°C)

Solubility in water: 1370g/l (22°C)

pH: 6.0

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable at ambient temperatures, relatively unstable to light.

Hazardous polymerization: Will not occur.

Conditions to avoid: Avoid sources of ignition and extreme heat

Materials to Avoid: Avoid contact with strong oxidizing agents, acids or bases.

Ammonia may be evolved in the materials presence of alkalis.

Hazardous Decomposition Products: Oxides of carbon and nitrogen, hydrogen chloride, combustion products sulphur dioxide etc.



SAFETY DATA SHEET

G-FOSINATE

Date of Issue : 2nd Jan 2023

SECTION 11 – TOXICOLOGY INFORMATION

Acute studies :

- Oral LD50(Male rats): 2000 a.i.mg/kg
- Oral LD50(female rats): 1620 a.i.mg/kg
- Oral LD50(Male mouse): 431 a.i.mg/kg
- Oral LD50(female mouse): 416 a.i.mg/kg
- Dermal LD50(Male rats): > 4000 a.i.mg/kg
- Dermal LD50(Female rats): 4000 a.i.mg/kg

Acute Inhalation LC50 (rats for 4h): 1.26 a.i.mg/L air (dust) for male, 2.60a.i.mg/L air(dust) for female

Contact with the skin: Slight signs of skin irritation of rabbits

Contact with the eyes: Slight signs of eye irritation of rabbits

Sensitization (Guinea pig, Derma): Not sensitizing . No tetraogenic and neurotoxicity effects. Harmful if swallowed or if inhaled.

SECTION 12 – ECOLOGICAL INFORMATION

Eco-Acute Toxicity (Technical Grade):

- Fish (Rainbow trout) LC50(96h): 710 a.i.mg/L
- Fish (Bluegill sunfish) LC50 (96h): 1000 a.i.mg/L
- Fish (Daphnia magna) LC50 (48h): 560-1000 a.i.mg/L
- Birds (Japanese quail) : Oral LC₅₀ (8d)>5000 a.i.mg/kg
- Earthworm, LD50 (48h): > 1000 a.i.mg/L
- Honeybees LD50 (contact):100 a.i.µg/bee

Environmental Fate: *Glufosinate-ammonium* is very soluble in water and is hydrolytically and photolytically stable. Its mobility under laboratory conditions varies widely, depending upon the soil type. However, the results of numerous terrestrial field dissipation studies indicate that the potential for groundwater contamination is minimal. This appears to be primarily a result of its rapid degradation by microorganisms in the soil and a tendency to bind to certain soil elements resulting in no measurable leaching. *Glufosinate-ammonium* does not accumulate in fatty tissues of fish or other animals.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal:



SAFETY DATA SHEET

G-FOSINATE

Date of Issue : 2nd Jan 2023

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal:

Empty containers should be triple rinsed (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

SECTION 14 – TRANSPORT INFORMATION

Not applicable

SECTION 15 – REGULATORY INFORMATION

This product is registered under Malaysia Pesticides Act 1974.

SECTION 16 – OTHER INFORMATION

This SDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

-End of SDS-