

Spinochem Tech Co.Ltd

Add: No 2278,Zhaochong Rd, Shanghai, China.

Material Safety Data Sheet

Glufosinate ammonium 150g/L SL

Section 1 - Chemical Product and Company Identification

Product Name:

Glufosinate ammonium 150g/L SL

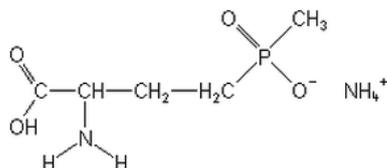
Company Identification:

Name: Spinochem Tech Co.,Ltd

Address:No.2278,Zhaochong Rd,Shanghai,China

Section 2 - Composition, Information on Ingredients

Components	CAS No.	(Content, g/L)
Glufosinate-ammonium	77182-82-2	150
Other ingredients	-	Up to 1L

Structural formula:

Molecular formula: C₅H₁₅N₂O₄P

Molecular Weight: 198.19

Chemical Abstracts name:

2-amino-4-(hydroxymethylphosphinyl)butanoic acid, monoammonium salt

IUPAC name:

ammonium(DL)-homoalanin-4-yl(methyl)phosphinate

Section 3 - Hazards Identification

Emergency overview: Causes moderate eye irritation. Avoid contact with eyes or clothing.

Health hazards:

Likely Routes of Exposure: Skin contact and inhalation

Eye Contact: The product may cause pain, redness and tearing as shown by toxicity

Spinochem Tech Co.Ltd

Add: No 2278,Zhaochong Rd, Shanghai, China.

studies.

Skin Contact: The product is only slightly toxic and only slightly irritating as shown by toxicity studies.

Ingestion: The product is only slightly toxic as shown by toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed. Ingestion of similar formulations has been reported to produce gastrointestinal discomfort with irritation of the mouth, nausea, vomiting and diarrhea. Oral ingestion of large quantities of one similar product has been reported to result in hypotension and lung edema.

Inhalation: The product is only slightly toxic if inhaled as shown by toxicity studies.

Physical hazards: May react with metals such as galvanized or mild steel to produce hydrogen gas, potentially forming a highly combustible gas mixture.

Section 4 - First Aid Measures

General: Have the product container, label or Material Safety Data Sheet with you when going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

Skin contact: Wash with plenty of soap and flowing water for at least 15 minutes while removing contaminated clothing. Wash clothing before reuse.

Eye contact: Immediately flush with flowing water for at least 15 minutes. Seek medical attention if irritation occurs.

Ingestion: If swallowed, drink several glasses of water. DO NOT induce vomiting unless patient has induced high doses. Seek medical advice.

Inhalation: If ill-effects occur, move the victim to fresh air. If ill-effects persist, consult a doctor.

Note to physician: No specific antidote. Treat symptomatically.

Section 5 - Fire Fighting Measures

Flash point: Not highly flammable

Flammable Limits (LFL-UFL): N/A

Fire and Explosion Hazards: During a fire, product may generate irritating or toxic gasses through thermal decomposition.

Means of Extinction: Use water spray, foam or dry chemical.

Fire Fighting Instructions: Evacuate area and fight fire from a safe distance. Approach from upwind to avoid hazardous vapors and decomposition products. A foam or dry chemical fire extinguishing system is preferred to prevent environmental damage from excessive water run off. If water is used, avoid heavy hose streams. If possible, dike and collect water used to fight fire to prevent/minimize run off.

Fire Fighting Equipment: Self-contained breathing apparatus with full face piece.

Spinochem Tech Co.Ltd

Add: No 2278,Zhaochong Rd, Shanghai, China.

Wear full firefighting turn-out gear (Bunker gear).

Hazardous Combustion Products: Carbon monoxide, nitrogen oxides, phosphorous oxides.

Section 6 - Accidental Release Measures

Personal precautions: Wear protective clothing and personal protective equipment as prescribed in Section 8 “Exposure Controls/Personal Protection”. Keep unprotected persons and animals out of area.

Environmental precautions: Do not allow to enter drains or water courses. If contamination of drains, streams, watercourses etc. is unavoidable, warn the local water authority.

Method for cleaning up: Clean up spills immediately. Small Spill: Absorb spill with inert material such as dry sand, vermiculite or fuller’s earth, then place in a chemical waste container. Large Spill: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify and scrape up for disposal. After removal, scrub the area with detergent and water and neutralize with dilute alkaline solutions of soda ash or lime.

Section 7 - Handling and Storage

Handling: Read the label before use. Keep out of reach of children. Harmful if swallowed. Causes skin irritation and sensitivity. Avoid contact with skin and clothing. After work, remove protective clothing and equipment, wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Clean up spilled material immediately, and wash clothes, equipment and work area after use.

Storage: Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. This product can be stored in an unheated building. Do not store with food, feed stuffs, fertilizers and seeds. See product label for further handling/storage precautions relative to the end use of this product.

Section 8 - Exposure Controls, Personal Protection

Exposure limits: No exposure limits have been established for this material.

Engineering controls: To keep exposure to airborne contaminants below exposure limits, proper ventilation is required when handling or using this product. Local mechanical exhaust ventilation may be required. Facilities storing or using this material should be equipped with an eyewash facility and a safety shower.

Personal protective equipment (PPE):

Skin protection: All pesticide handlers must wear a long-sleeved shirt and long pants

Spinochem Tech Co.Ltd

Add: No 2278,Zhaochong Rd, Shanghai, China.

and shoes plus socks. Waterproof gloves are recommended when mixing, loading or cleaning equipment.

Eye protection: Safety goggles are recommended when mixing, loading or cleaning equipment.

User safety recommendations: Do not get in eyes or get in or on clothing. Avoid breathing vapor or spray mist. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Wash thoroughly with soap and water after handling. Remove contaminated clothing immediately and wash before reuse. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Section 9 - Physical and Chemical Properties

Form: Liquid

Color: Blue to green liquid

Odor: Light Odor

Density: 1.18 g/cm³ at 20 °C

pH: 4.4

Solubility: Fully miscible with water

Section 10 - Stability and Reactivity

Chemical stability: Product is normally stable. However, product may decompose if heated.

Conditions to avoid: Avoid temperatures above 115°F (46°C) and below 25°F (-5°C).

Hazardous decomposition: Heat and fire may result in thermal decomposition and the release of nitrogen oxides, phosphorous oxides and carbon monoxide.

Incompatible materials: Strong oxidizers and bases, mild and galvanized steel.

Hazardous reactions: Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Acute toxicity:

Oral: LD₅₀ (rat): >5,000 mg/kg

Dermal: LD₅₀ (rat): >2,000 mg/kg

Inhalation: LC₅₀ (rat): >2.0 mg/L

Irritant properties:

Skin: (Rabbit) Non irritation

Eye: (Rabbit) Slightly irritation

Allergenic and sensitizing effects: Not considered to be a skin sensitizer (Guinea

Spinochem Tech Co.Ltd

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pig).

Chronic toxicity/Carcinogenicity: Animal studies did not detect any carcinogenic effects.

Genetic effects/Mutagenicity: Animal studies did not detect any mutagenic effects.

Teratogenicity: Animal studies did not detect any teratogenic effects.

Section 12 - Ecological Information

The following information is for the active ingredient, Glufosinate ammonium.

Ecotoxicity:

Birds Low toxicity to birds.

Acute oral LD₅₀: >2000 mg/kg (bobwhite quail).

Fish LC₅₀ (96 h): for trout and bluegill sunfish >100

Bees Non toxic to bees.

LD₅₀ (oral): > 100 µg/bee.

LD₅₀ (contact): > 100 µg/bee.

Earthworm: LC₅₀ (14 days): for Eisenia foetida >1000 mg/kg soil.

Persistence and degradability: Microbial degradation is the major cause of loss from soil, with liberation of carbon dioxide. The principal metabolite is aminomethylphosphonic acid. In soil the half-life of the product is less than 60 days.

Bioaccumulative potential: The product shows little or no tendency to bioaccumulate and poses no long term threat to wildlife.

Mobility in soil: The product is practically immobile and is unlikely to leach.

Section 13 - Disposal Considerations

Pesticide disposal: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

Container disposal: For plastic containers, triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. For refillable containers, do not reuse the container except for refill in accordance with Toll Repackaging Agreement. If not refilled or returned to the authorized repackaging facility, triple rinse container, then 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. For bulk containers, triple rinse (or equivalent) and wash with appropriate cleaners before reusing.

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Section 14 - Transport Information

UN Number: Not regulated

UN Proper shipping name: Not regulated

Transport hazard class: Not regulated

Packing group: Not regulated

Section 15 - Regulatory Information

Risk symbols:

Xi Irritant

N Dangerous to the environment

Risk phrases:

R41 Risk of serious damage to eyes.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S2 Keep out of reach of children.

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S35 This material and its container must be disposed of in a safe way.

S39 Wear eye/face protection.

S61 Avoid release to the environment.

WHO Classification: (a.i) III

Section 16 - Additional Information

This MSDS 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 MSDS 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.