



MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Product Name: Glyphosate ammonium 371 g/L + 2,4-D 24 g/L SL

Product Class: Herbicide

Chemical Name:

Glyphosate: N-(phosphonomethyl)glycine

2,4-D: (2,4-dichlorophenoxy)acetic acid

Formulation: Solution Concentrate (SL)

Supplier: Shenzhen YuFull Industries Co., Ltd

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2. HAZARDS IDENTIFICATION

Emergency Overview

Health Hazard likely routes of exposure Skin contact and inhalation

Potential Health Hazards:

Eye contact: The product may cause pain, redness and tearing.

Skin contact: The product is only slightly toxic and only slightly irritating.

Ingestion: The product only slightly toxic. The gastrointestinal discomfort with irritation in mouth, vomiting and diarrhea.

Inhalation: The product is slightly toxic by this route.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance	CAS No.	Proportions
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Glyphosate ammonium	40465-66-5	371g/L
2,4-D	94-75-7	240g/L
Other ingredients	--	Up to 100%

4. FIRST AID MEASURES

IF INHALED: Remove person from exposure area to fresh air. If not breathing difficulty, give artificial respiration, preferably mouth to mouth. Get medical attention.

IF ON SKIN: Take off contaminated clothing. Wash skin with plenty of soap and water. Get medical attention if irritation persists.

IF SWALLOWED: The product will cause gastrointestinal irritation. Immediately dilute by swallowing water and milk. Get medical attention.

IF IN EYES: Hold eye open and rinse with plenty of water. If irritation continues, call a doctor.

ANTIDOTE: Give symptomatic and supportive treatment as per symptoms and cause.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turnout gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Vacuum or sweep up material and place in properly labeled disposal container.

Dike to confine spill and absorb with non-combustible absorbent like clay, sand or soil. Vacuum shovel or



pump waste in to drum and label contents for disposal. Large spills may be neutralized with bantonite or other absorbent clays. After removal, flush contaminated area thoroughly with water. Do not allow any material to run off in soil, drainage systems or bodies of water. Notify and consult with proper regulatory authorities.

7. HANDLING AND STORAGE

Handling Do not get in eyes or on clothing. Avoid breathing spray mist and contact with skin. Users should wash hands, face and arms before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

If the container is over one gallon and less than five gallons, then persons engaged in open pouring of the product must also wear coveralls or a chemical-resistant apron. If the container is five gallons or more in capacity, do not open pour product from the container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

Storage Store in the closed, original container in a dry, well ventilated area, as cool as possible out of direct sunlight and under lock and key. Keep from contact with fertilisers, fungicides and seeds. Stores containing more than 100 kg of this product, either alone or in aggregate with other hazardous substances are subject to requirement of an emergency management response plan, secondary containment and signage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROL: Use local exhaust ventilation at all processes locations where vapor or mist may be emitted. Ventilate all transport vehicles prior to unloading.

PERSONAL PROTECTIVE EQUIPMENT:

EYE AND FACE PROTECTION - Safety goggles or face shield. Storing facility should be equipped with eye wash facility and safety shower.



CLOTHING – Long sleeved shirt and long pants, shoes plus socks, chemical resistant headgear for overhead exposures.

GLOVES – Wear waterproof gloves.

USER SAFETY RECOMMENDATIONS – Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside . Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible , wash thoroughly and change in to clean clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow Liquid

Solvent odour: Faint fish-like odor

Density: 1.120

PH Value: 6.2-7.2.

Flammability limits: Non-flammable

10. STABILITY AND REACTIVITY

Chemical stability: Stable

Conditions to avoid: High heat, open flames

Incompatibility with other materials: Strong oxidizing agents: bases and acids.

Hazardous decomposition products: None known

Hazardous polymerisation: Will not occur.

11. TOXICOLOGICAL INFORMATION

Information on product:

LD50 (species and route)

ORAL: LD50, Rat 2000 mg/kg b.w

DERMAL: LD50, Rat 5000 mg/kg b.w



LC50 (species)

INHALATION: LC50 Rat 2.0 mg/L air (4 hours)

Irritation data

EYE: Moderately irritating (rabbit)

SKIN: Slightly irritating (rabbit)

Results of studies on:

- Sensitization: Slightly sensitizer

Chronic toxic to the maternal animal.

- Carcinogenicity: None observed

- Reproductive toxicity: Glyphosate is a reproductive toxin in animal studies at doses

- Teratogenicity: not reveal any teratogenic properties

- Mutagenicity: None observed (Ames Test and Micronucleus Test)

- Chronic exposure: Central nervous system effects in animals.

12. ECOLOGICAL INFORMATION

Bees

Toxic to bees LD50 = 11.5 ug/bee

Birds

Non Toxic to Birds Acute Oral: LD50 Bob-white Quail >500 mg/kg

The Aquatic Organisms Fish

Toxicity: Toxic LC50 (96h) in trout (Rainbow) 86 mg/kg LC50 (96h) in Bluegill Sunfish 120 mg/kg

13. DISPOSAL CONSIDERATION

Waste disposal information: Do not reuse containers. Rinse the emptied container thoroughly and add the rinsings to the mixture in the spray tank. Dispose of product containers, waste containers and residues in accordance with municipal and provincial regulations. Waste shipments must be securely packed, properly labelled, and documented. Keep this material out of any bodies of water.



14. TRANSPORT INFORMATION

Proper Shipping Name Environmentally Hazardous Substance, Liquid, N.O.S.

DG Class Class 9

UN Number UN3082

Packing Group PG III

Marine Pollutant Yes

NOTE: Not Regulated unless in bulk package or shipped by water.

15. REGULATORY INFORMATION

Symbol:

Xn Indication of dangerous: Harmful

N: Dangerous to the environment

Risk phrases:

R20 Harmful by inhalation.

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R61 May cause harm to the unborn child.

Safety Phrases:

S2 Keep out of reach of children.

S13 Keep away from food, drink and animal feedstuffs.

S23 Do not breathe vapour or spray.

S24/25 Avoid contact with skin and eyes.

S36/37/39 Wear suitable protective clothing and gloves and eye/face protection.

16. OTHER 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



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the information in the context of the 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 the company.