1. IDENTIFICATION OF COMPANY & PRODUCT

Product Name: Ammonium salt of Glyphosate 71% SG  
Chemical Name: N-(phosphonomethyl) glycine  
Brand Name: GYPROM-71  
Users: Herbicide  
Molecular Formula: C₃H₈NO₅P  
Manufacturer: CROP LIFE SCIENCE LTD.  
Address: Plot No. 5165, 5166, 5151, G.I.D.C., and Ankleshwar-393002, Gujarat, India  
Tele Fax Number: 91 2646 238479

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Cas #</th>
<th>Percent Or Content(W/W) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium salt of glyphosate</td>
<td>40465-66-5</td>
<td>71%</td>
</tr>
<tr>
<td>Surfactants</td>
<td>-</td>
<td>8%</td>
</tr>
<tr>
<td>Ammonium sulphate</td>
<td>7783-20-2</td>
<td>21%</td>
</tr>
</tbody>
</table>

3. HEALTH HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:  
PHYSICAL APPEARANCE: White Solid granules  
IMMEDIATE CONCERNES: Causes Eye Irritation. Avoid Contact With Eyes Or Clothing. Wash Thoroughly With Soap And Water After Handling. Keep Out Of Reach of Children

4. FIRST AID MEASURES

EYES: Immediately flush with plenty of water. Continue for at least 15 minutes. If easy to do, remove contact lenses. If there are persistent symptoms, obtain medical advice.

SKIN: Wash affected skin with plenty of water. Wash clothes before re-use. Take off contaminated clothing, wristwatch, and jewelry.

INGESTION: Immediately offer water to drink. Do NOT induce vomiting unless directed by...
medical personnel. If symptoms occur, get medical attention.

INHALATION: Remove to fresh air.

ADVICE TO DOCTORS: This product is not an inhibitor of cholinesterase.

ANTIDOTE: Treatment with atropine and oximes is not indicated.

5. FIRE FIGHTING MEASURES

FLASH POINT: Does not flash.

EXTINGUISHING MEDIA: Recommended: Water, dry chemical, carbon dioxide (CO₂), foam

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS PRODUCTS OF COMBUSTION: Carbon monoxide (CO), nitrogen oxides (NOₓ), phosphorus oxides (PₓOᵧ)

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use personal protection recommended in Section 8.

SMALL QUANTITIES: Low environmental hazard.

LARGE QUANTITIES: Minimize spread. Keep out of drains, sewers, ditches and water ways.

METHODS FOR CLEANING UP:

SMALL QUANTITIES: Flush spill area with water.

LARGE QUANTITIES: Absorb in earth, sand or absorbent material. Dig up heavily contaminated soil. Collect in containers for disposal. Refer to Section 7 for types of containers. Flush residues with small quantities of water. Minimize use of water to prevent environmental contamination.

Refer to Section 13 for disposal of spilled material.

7. HANDLING AND STORAGE

HANDLING: Good industrial practice in housekeeping and personal hygiene should be followed. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Wash
hands thoroughly after handling or contact. Thoroughly clean equipment after use. Emptied containers retain vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. FOLLOW LABELED WARNINGS EVEN AFTER CONTAINER IS EMPTIED.

STORAGE: Compatible materials for storage: stainless steel, aluminum, plastic, fiberglass, glass lining. Incompatible materials for storage: galvanized steel, unlined mild steel (See Section 10). Keep out of reach of children. Keep away from food, drink and animal feed. Keep only in the original container. Partial crystallization may occur on prolonged storage below the minimum storage temperature. If froze, place in warm room and shake frequently to put back into solution. Minimum shelf life: 5 years.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Have eye wash facilities immediately available at locations where eye contact can occur.

EYES PROTECTION: If there is potential for contact, wear chemical goggles.

SKIN PROTECTION: If repeated or prolonged contact, wear chemical resistant gloves.

RESPIRATORY PROTECTION: No special requirement when used as recommended. When recommended, consult manufacturer of personal protective equipment for the appropriate type of equipment for a given application.

9. PHYSICAL AND CHEMICAL PROPERTIES

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Appearance: Light yellow granules
Relative density: 0.6 g/cm³ (20 °C)
Solubility in water: Soluble in water
Flash point: Not applicable
pH: 3.0 – 5.0 (1% Solution)

10. STABILITY AND REACTIVITY

STABLE: Stable under normal conditions of handling and storage.
HAZARDOUS DECOMPOSITION: Thermal decomposition: No data. Hazardous products of combustion: see Section 5.
MATERIALS TO AVOID/REACTIVITY: Reacts with bases to liberate heat. Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.
HAZARDOUS POLYMERIZATION: Does not occur.

11. TOXICOLOGICAL INFORMATION

LD50 oral rat: > 3000 mg/kg in rats
LD50 dermal rat: > 4000 mg/kg
LC50 inhalation rat: > 2 mg/l
Acute skin irritation: Not irritant to skin.
Acute eye irritation: Moderately irritating to eyes (rabbit).
Carcinogenicity: Animal studies did not detect any carcinogenic effects.
Reproductivity: Reproductive changes in test animals only occur at very high doses. It is unlikely that glyphosate would produce effects in humans.

12. ECOLOGICAL INFORMATION

LC50 fish: 4.2 mg/l
EC50 Daphnia: 3.8 mg/l
EC50 algae: 1.8-3.6 mg/l
Oral toxicity bees: 276.7 µg a.s. /bee
Dermal toxicity bees: > 200 µg a.s. /bee

Degradability: Glyphosate is moderately persistent in soil, with estimated average half-life of 47 days. Microbes are primarily responsible for breakdown. Glyphosate is strongly adsorbed to suspended organic and mineral matter in water, and broken down primarily by microbes. Half-life ranges from 12 days to 10
Mobility: The product is practically immobile. It is strongly adsorbed to most soils. It does not leach appreciably, and has low potential for runoff.

Accumulation: The product shows little or no tendency to bio-accumulate and poses no long term threat to wildlife.

Other Beneficial organisms: No effect on carabid beetles. Harmless to slightly harmful to green lacewing, parasite species, mites / spiders and insects. Moderately harmful to Bembidion lampros.

13. DISPOSAL CONSIDERATIONS

Product: Dispose of as hazardous industrial waste. Recycle if appropriate facilities/equipment available. Burn in special, controlled high temperature incinerator. Keep out of drains, sewers, ditches and water ways. Follow all local/regional/national regulations.

Container: Triple rinse empty containers. Pour rinse water into spray tank. Store for collection by approved waste disposal service. Dispose of as hazardous industrial waste. Do NOT re-use containers. Follow all local/regional/national regulations.

14. TRANSPORT INFORMATION

UN NUMBER: 3077
Road Transport ADR/IRD:
Class: 9
Packing group: III
Shipping name: Environmentally hazardous substance, solid, N.O.S. (herbicide - glyphosate)

Air Transport ICAO/IATA:
Class: 9
Packing group: III
Shipping name: Environmentally hazardous substance, solid, N.O.S. (herbicide - glyphosate)

Maritime Transport IMDG/IMO:
Class: 9
Packing group: III
Shipping name: Environmentally hazardous substance, solid, N.O.S. (herbicide - glyphosate)

15. REGULATORY INFORMATION
TSCA Inventory: All components are on the US EPA's TSCA Inventory
SARA Title III Rules: Section 311/312 Hazard Categories
  Immediate
  Section 302 Extremely Hazardous Substances Not applicable.
  Section 313 Toxic Chemical(s) Not applicable.
CERCLA Reportable quantity: Not applicable.

16. OTHER INFORMATION

The information given here is not necessarily exhaustive but is representative of relevant, reliable data. For more information refer to product label. Please consult Repar if further information is needed. Follow all local/regional/national regulations.

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