1. IDENTIFICATION OF COMPANY & PRODUCT

Product Name: Isopropyl amine salt of Glyphosate 41% SL
Chemical Name: N-(phosphonomethyl) glycine
Brand Name: GLYKILL
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>Isopropyl amine salt of glyphosate</td>
<td>3641-94-0</td>
<td>41%</td>
</tr>
<tr>
<td>Surfactants</td>
<td>-</td>
<td>8%</td>
</tr>
<tr>
<td>Water</td>
<td>-</td>
<td>45%</td>
</tr>
</tbody>
</table>

3. HEALTH HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
PHYSICAL APPEARANCE: Yellow or off-white hazy liquid.
IMMEDIATE CONCERNS: 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.

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### 5. FIRE FIGHTING MEASURES

**FLASH POINT**: Does not flash.

**EXTINGUISHING MEDIA**: Recommended: Water, dry chemical, carbon dioxide (CO$_2$), foam

**UNUSUAL FIRE AND EXPLOSION HAZARDS**: None

**HAZARDOUS PRODUCTS OF COMBUSTION**: Carbon monoxide (CO), nitrogen oxides (NO$_x$), phosphorus oxides (P$_x$O$_y$)

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

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### 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.

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### 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

#### AIRBORNE EXPOSURE LIMITS:

<table>
<thead>
<tr>
<th>Components</th>
<th>Exposure Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl amine salt of glyphosate Limit has been established</td>
<td>No specific occupational exposure</td>
</tr>
<tr>
<td>Surfactant Limit has been established</td>
<td>No specific occupational exposure</td>
</tr>
<tr>
<td>Water Limit has been established</td>
<td>No specific occupational exposure</td>
</tr>
</tbody>
</table>

#### 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.
PHYSICAL STATE: Liquid
ODOR: Slight
FLASH POINT: Does not flash
SPECIFIC GRAVITY: 1.1655 @ 20°C/15.6°C
pH: 4.4 – 5.0
PARTITION COEFFICIENT (Log Pow): <0.000 (active ingredient)

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: > 4000 mg/kg
LD50 dermal rat: > 4000 mg/kg
LD50 dermal rabbit:
LC50 inhalation rat: Not irritant to skin. Irritant to the eyes. None sensitizing to skin.

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

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

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Not hazardous under the applicable DOT, ICAO/IATA, IMO, TDG and Mexican regulations.

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 if further information is needed. Follow all local/regional/national regulations.
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