SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Shar-Max Glyphosate 41% SL
SYNONYMS: Shypho 41% SL
EPA REGISTRATION NO.: 83529-19
MANUFACTURER: Sharda USA LLC
ADDRESS: 7460 Lancaster Pike, Suite 9
          Hockessin, DE 19707
PHONE: (302) 234-2780
FAX: (302) 234-7570
EMAIL: shardain@vsnl.com
WEBSITE: www.shardaintl.com
EMERGENCY PHONE: 1(800) 222-1222
CHEMTREC PHONE: 1(800) 424-9300

CHEMICAL NAME: glyphosate isopropylammonium
N-(phosphonomethyl)glycine - isopropylamine (1:1) or isopropylammonium N-(phosphonomethyl)glycinat
CHEMICAL FAMILY: glycine

CHEMICAL FORMULA: C_{6}H_{16}N_{2}O_{5}P
PRODUCT USE: Herbicide
PREPARED BY: Sharda USA LLC

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENT: glyphosate isopropylammonium

<table>
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<th>CAS NO.</th>
<th>% WT</th>
<th>% VOL</th>
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</table>

OSHA PEL-TWA: N/A ppm, N/A mg/m3
OSHA PEL STEL: N/A ppm, N/A mg/m3
OSHA PEL CEILING: N/A ppm, N/A mg/m3

ACGIH TLV-TWA: N/A ppm, N/A mg/m3
ACGIH TLV STEL: N/A ppm, N/A mg/m3
ACGIH TLV CEILING: N/A ppm, N/A mg/m3

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: CAUTION. Causes moderate eye irritation. Avoid contact with eyes or clothing.

ROUTES OF ENTRY: Eye and dermal contact.

POTENTIAL HEALTH EFFECTS

EYES: May cause temporary eye irritation.

SKIN: Not expected to produce significant adverse effects when recommended use instructions are followed.

INHALATION: Not expected to produce significant adverse effects when recommended use instructions are followed.
SECTION 4: FIRST AID MEASURES

<table>
<thead>
<tr>
<th>FIRST AID</th>
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</table>
| **If swallowed:** | - Call a poison control center or doctor immediately for treatment advice.  
- Have person sip a glass of water if able to swallow.  
- Do not induce vomiting unless told to do so by a poison control center or doctor.  
- Do not give anything by mouth to an unconscious person. |
| **If on skin:** | - Take off contaminated clothing.  
- Rinse skin immediately with plenty of water for 15-20 minutes.  
- Call a poison control center or doctor for treatment advice. |
| **If inhaled** | - Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably mouth to mouth, if possible.  
- Call a poison control center or doctor for further treatment advice. |
| **If in eyes** | - Hold eye open and rinse slowly and gently with water for 15-20 minutes.  
- Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.  
- Call a poison control center or doctor for treatments advice. |

**HOT LINE NUMBER**

Note to Physician: This product is not an inhibitor of cholinesterase. Treatment with atropine and oximes is not indicated. Have a product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222. For chemical emergency assistance (spill, leak, fire, or accident) call ChemTrec at 1-800-424-9300.

SECTION 5: FIRE-FIGHTING MEASURES

**FLAMMABLE LIMITS IN AIR, UPPER:** Not applicable.  
(% BY VOLUME) **LOWER:** Not applicable.  

**FLASH POINT:** None.

**AUTOIGNITION TEMPERATURE:** Not applicable.

**FLAMMABILITY:** Not applicable.

**EXTINGUISHING MEDIA:** Water, foam, dry chemical, carbon dioxide.

**SPECIAL FIRE FIGHTING PROCEDURES:** Evacuate personnel to safe area. Keep personnel removed and upwind of fire. Wear full protective clothing and self-contained breathing apparatus. If water spray is used to fight fire, dike and collect runoff. Prevent the use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce irritating and possibly toxic gases including carbon monoxide, nitrogen oxides (NOx), phosphorus oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE MEASURES:** Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**SECTION 6 NOTES:**

Small Spill: Absorb small spills with sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal. Scrub area with hard water detergent. Pick up wash liquid with additional absorbent and place into appropriate container for disposal.

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. Pick up wash liquid with additional absorbent and place in a disposable container. After removal, flush contaminated area thoroughly with water. This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.
SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store the material in a cool, dry, secure area out of reach of children and domestic animals. STORE ABOVE 10°F (-12°C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, place in a warm room 68°F (20°C) for several days to redissolve and shake or roll to mix well before using. Do not store food, beverages or tobacco product in the storage area. Prevent eating, drinking tobacco use and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and after handling.

OTHER PRECAUTIONS: Do not contaminate water, food, or feed by storage or disposal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Refer to product label.

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation, packaging and use of this product. For commercial applications and/or on-farm applications consult the product label.

EYE PROTECTION: Wear safety goggles when mixing, loading, or cleaning equipment.

INGESTION: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

SKIN PROTECTION: Long-sleeved shirt, long pants, shoes plus socks. Chemical-resistant gloves, if repeated or prolonged contact.

INHALATION: No special requirement when used as recommended.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them. Follow manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

WORK HYGIENIC PRACTICES: Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

EXPOSURE GUIDELINES: Refer to Section 2.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light-yellow

ODOR: Odorless

PHYSICAL STATE: Liquid

pH AS SUPPLIED: 5.72

SPECIFIC GRAVITY (H2O = 1): 1.1663 g/cm³

SECTION 10: STABILITY AND REACTIVITY

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<th>UNSTABLE</th>
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STABILITY: Stable at normal temperature and pressure. Stable at 0 deg C for 7 days. May decompose if heated.

CONDITIONS TO AVOID (STABILITY): Temperatures above 115 deg F (46 deg C) and temperatures below 25 deg C (-5 deg C).

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizers or bases, mild and galvanized steel, potassium permanganate.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition can lead to the release of toxic gases including carbon monoxide, nitrogen oxides, phosphorus oxides.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:
Oral LD₅₀ (rat)   >2,000 mg/Kg
Dermal LD₅₀ (rat) >2,000 mg/Kg
Inhalation LC₅₀ (rat)  4 hr exposure 0.896 mg/L
Eye Contact:  Not an irritant (Rabbit)
Skin Contact:  Not an irritant (Rabbit)
Skin Sensitization:  Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects: No evidence of mutagenic effects during in vivo or in vitro studies.
Chronic/subchronic toxicity studies OSHA/NTP/IARC: Not listed.
Carcinogenicity No data available.
Other toxicity information None
Toxicity of other components No data available.
Target organs
Active ingredient (glyphosate isopropylammonium) No data available.
Inert ingredient Not applicable

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

Summary of effects: This material is moderately toxic to fish.
Eco Acute Toxicity: 96 Hour LC₅₀, Rainbow Trout: 8.2 mg/L
96 Hour LC₅₀, Bluegill: 5.8 mg/L
Eco Chronic Toxicity: Oral LD₅₀ Bobwhite Quail: > 3,800 mg/kg
Oral LD₅₀ Mallard Duck - Unknown
Environmental fate: Not available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Product disposal – Pesticide wastes may be acutely hazardous. Improper disposal is a violation of federal law. Pesticide, mixtures, or equipment rinse water that cannot be chemically reprocessed must be disposed of according to applicable federal, state or local regulations. Contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

Container disposal – Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

RCRA HAZARD CLASS: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

SECTION 14: TRANSPORT INFORMATION

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

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS
TSCA (TOXIC SUBSTANCE CONTROL ACT): The ingredients of this product are listed on the TSCA inventory or are exempt.
CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

302: Not applicable.

311/312 HAZARD CATEGORIES: Immediate Hazard

313 REPORTABLE INGREDIENTS: Not applicable.

CA PROPOSITION 65: None

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

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PREPARATION INFORMATION: MSDS DATE 1-5-10 REVISION DATE

DISCLAIMER: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. The information contained herein is given in good faith and is believed to be correct, but no warrant, express or implied is made. Consult Sharda USA LLC for further information.