

**MATERIAL SAFETY DATA SHEET**

Shypho-Aq Aquatic and VM Herbicide

MSDS DATE: 04/15/2010

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** Shypho-Aq

**SYNONYMS:** N/A

**EPA REGISTRATION NO.:** 83529-23

**MANUFACTURER:** Sharda USA LLC

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Hockessin, DE 19707

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**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 or glyphosate, N-(phosphonomethyl)-glycine, as isopropylamine salt

**CHEMICAL FAMILY:** N-(phosphonomethyl)glycine - isopropylamine (1:1) or isopropylammonium N-(phosphonomethyl)glycinate  
glycine

**CHEMICAL FORMULA:** C<sub>6</sub>H<sub>17</sub>N<sub>2</sub>O<sub>5</sub>P

**PRODUCT USE:** Herbicide

**PREPARED BY:** Sharda USA LLC

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

**ACTIVE INGREDIENT:** glyphosate isopropylammonium or glyphosate, N-(phosphonomethyl)-glycine, as isopropylamine salt

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
38641-94-0	53.8	53.8	No
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:	N/A	N/A	
OSHA PEL STEL :	N/A	N/A	
OSHA PEL CEILING:	N/A	N/A	
ACGIH TLV-TWA:	N/A	N/A	
ACGIH TLV STEL:	N/A	N/A	
ACGIH TLV CEILING:	N/A	N/A	

**SECTION 3: HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW:** CAUTION. Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling

**ROUTES OF ENTRY:** Inhalation.

**POTENTIAL HEALTH EFFECTS**

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

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

**INHALATION:** Harmful if inhaled

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CARCINOGENICITY – None known.

**SECTION 4: FIRST AID MEASURES**

FIRST AID	
If inhaled	<ul style="list-style-type: none"> <li>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.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
HOT LINE NUMBER	
<p>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.</p>	

**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:** 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. Spray solutions of this product must be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers. **DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS.** This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

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

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**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:** Avoid breathing vapor or mist.

**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.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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**APPEARANCE:** Colorless

**ODOR:** Odorless

**PHYSICAL STATE:** Liquid

**pH AS SUPPLIED:** 4.6

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** 1.206 g/cm<sup>3</sup>

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**SECTION 10: STABILITY AND REACTIVITY**

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STABLE  
X

UNSTABLE

**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.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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### TOXICOLOGICAL INFORMATION:

Oral LD <sub>50</sub> (rat)	>2,000 mg/Kg
Dermal LD <sub>50</sub> (rat)	>2,000 mg/Kg
Inhalation LC <sub>50</sub> (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 contaminate water when disposing of equipment washwaters or rinsate. Treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss can cause fish suffocation. In case of spill or leak, soak up and remove to a landfill.

#### Summary of effects:

Eco Acute Toxicity:	Not available
Eco Chronic Toxicity:	Not available
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):**

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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

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**SECTION 16: OTHER INFORMATION**

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**OTHER INFORMATION:**

<b>HAZARD RATINGS</b>	<b>NFPA</b>		
<b>HEALTH:</b>	2	0	MINIMAL
<b>FLAMMABILITY:</b>	1	1	SLIGHT
<b>REACTIVITY:</b>	1	2	MODERATE
		3	HIGH
		4	SEVERE

**PREPARATION INFORMATION:** MSDS DATE 4/15/2010  
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.