

**MATERIAL SAFETY DATA SHEET****SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**COMPANY ADDRESS:**  
ALBAUGH, INC.  
Ankeny, IA 50021

**EMERGENCY TELEPHONE NUMBERS:**  
(800) 424-9300 (CHEMTREC, transportation and spills)

**PRODUCT NAME** : GLY STAR PLUS  
**CHEMICAL NAME** : Isopropylamine Salt of Glyphosate  
**CHEMICAL FAMILY** : Herbicide  
**PRODUCT CODE** : EPA Reg. No. 42750-61

**SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS**

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL	ACIGH TLV
Isopropylamine Salt of Glyphosate*	41.0 %	38641-94-0	NOT EST	NOT EST
Inert Ingredients	59.0 %	n/a	n/a	n/a

**SECTION 3 - HAZARDS IDENTIFICATION SUMMARY**

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

**HEALTH HAZARDS:** Moderate eye irritant.

**PHYSICAL HAZARDS:** May react with metals such as galvanized or mild steel to produce hydrogen gas which could form a highly combustible gas mixture.

**ENVIRONMENTAL HAZARDS:** Moderately toxic to fish and aquatic plants. May be toxic to non-target plants.

**SECTION 4 - FIRST AID MEASURES**

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**SECTION 5 - FIRE FIGHTING MEASURES**

**FLASH POINT (method):** Will not flash.

**FLAMMABLE LIMITS:** Not Established

**FIRE AND EXPLOSION HAZARD:** May decompose in fire due releasing irritating or toxic gases.

**EXTINGUISHING MEDIA:** Use water spray, foam or dry chemical.

**FIGHTING INSTRUCTIONS:** Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam or dry chemical extinguishing systems recommended to prevent environmental damage due to water run off.

**FIREFIGHTING EQUIPMENT:** Self-contained breathing apparatus with full facepiece. Full firefighting turn-out gear (Bunker gear).

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, nitrogen oxides, phosphorous oxides.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**SMALL SPILL:** Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in 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. After removal, scrub the area with detergent and water and neutralize with dilute alkaline solutions of soda ash, or lime.

Wear appropriate personal protection equipment. (See Section 8 Exposure Controls, Personal Protection.)

## SECTION 7 - HANDLING AND STORAGE

**KEEP OUT OF REACH OF CHILDREN!**

**HANDLING:** Use only in a well-ventilated area. Wear appropriate safety equipment when handling.

**STORAGE:** Store in original container with lid tightly closed. Keep away from food, feed and drinking water. Store above 15° F (-10 C). If crystallized, warm to 80-90 F and redissolve by shaking container before using product.

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

**EXPOSURE LIMITS (8 hour TWA, ppm):** Refer to Section 3.

**ENGINEERING CONTROLS:** Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

### **PERSONAL PROTECTIVE EQUIPMENT:**

**EYE PROTECTION** - Safety goggles when mixing, loading or cleaning equipment is recommended.

**CLOTHING** - Long-sleeved shirt and long pants, Shoes plus socks,

**GLOVES** - Waterproof gloves when mixing, loading or cleaning equipment is recommended.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**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.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL DESCRIPTION:** Clear yellow to amber liquid.

**ODOR:** Slight amine like.

**SPECIFIC GRAVITY:** 1.17 g/ml (9.74 lb/gal)

**pH:** 4.4

**VAPOR PRESSURE:** Unknown

**VAPOR DENSITY:** Unknown

**WATER SOLUBILITY:** Emulsifies.

## SECTION 10 - STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable, however may decompose if heated.

**CONDITIONS TO AVOID:** Avoid temperatures above (115°F, 46°C) and below 25°F (-5°C).

**INCOMPATIBILITY WITH OTHER MATERIALS:** Strong oxidizers or bases, mild and galvanized steel.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, Nitrogen oxides, phosphorous oxides.

**HAZARDOUS POLYMERIZATION:** Product will not undergo polymerization.

### SECTION 11 - TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:**

Oral LD <sub>50</sub> (rat)	- > 5,000 mg/kg
Dermal LD <sub>50</sub> (rat)	- > 5,000 mg/kg (male)
Inhalation LC <sub>50</sub> (rat)	- > 2.5 mg/L
Eye Irritation (rabbit)	- Moderate
Skin Irritation (rabbit)	- Mild
Sensitization (guinea pig)	- Non-sensitizer

**CARCINOGEN STATUS:**

OSHA - Not listed  
 NTP - Not listed  
 IARC - Not listed

**MUTAGENIC DATA:** No evidence of mutagenic effects during *in vivo* or *in vitro* studies.

**ADDITIONAL DATA:** None

### SECTION 12 - ECOLOGICAL INFORMATION

**ENVIRONMENTAL SUMMARY:** Do not apply directly to water, 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.

**FISH TOXICITY:** (Glyphosate acid)

96 hour LC<sub>50</sub>, Rainbow trout – 8.2 mg/L

96 hour LC<sub>50</sub>, Bluegill – 5.8 mg/L

**AVIAN TOXICITY:** (Glyphosate acid)

Oral LD<sub>50</sub>, Bobwhite quail – > 3,800 mg/Kg

Oral LD<sub>50</sub>, Mallard duck – Unknown

**BEE:** Non-toxic

### SECTION 13 - DISPOSAL CONSIDERATIONS

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

**WASTE:** Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Emptied container retains vapor and product residue.

**CONTAINER:**

**(Plastic containers):** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**(Refillable containers):** Do not reuse this container except for refill in accordance with a valid Albaugh Repackaging or Toll Repackaging Agreement. If not refilled or returned to the authorized repackaging facility, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**PESTICIDE DISPOSAL:** Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

**SECTION 14 - TRANSPORT INFORMATION**

**DOT SHIPPING DESCRIPTION:** Compound, tree or weed killing, NOI, Class 60

**DOT HAZARD CLASS:** Not regulated  
**UN NUMBER:** N/A  
**DOT PACKING GROUP:** N/A  
**DOT PRIMARY/SECONDARY LABEL:** N/A  
**DOT PRIMARY/SECONDARY PLACARD:** N/A  
**DOT EMERGENCY RESPONSE GUIDE #:** N/A

**SECTION 15 - REGULATORY INFORMATION**

**CERCLA REPORTABLE QUANTITY:** N/A  
**SARA TITLE III STATUS:**  
311/312 Hazard Categories – Acute Health (immediate)  
313 Toxic Chemicals – N/A

**SECTION 16 - OTHER INFORMATION**

**DISCLAIMER:** The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

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