

# SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)



## SECTION 1: IDENTIFICATION

**Product Name:** Glyphosate Plus

**EPA Reg. No:** 83520-7

**Chemical Class:** Broad spectrum post-emergence herbicide

### Company Identification:

**TACOMA AG, LLC**

P.O. Box 14073

Durham, North Carolina 27709-9998

## SECTION 2: HAZARD IDENTIFICATION

**Classification in accordance with regulation HCS 29CFR §1910.1200**



### WARNING

Harmful if inhaled.

Avoid breathing spray mist.

Moderately irritating to eyes.

Avoid contact with eyes or clothing.

### Potential Health Effects:

**EYE:** May cause slight eye irritation.

**SKIN:** May cause slight skin irritation.

**CHRONIC:** Chronic feeding studies in mice and rats indicated no treatment related effects or evidence of carcinogenicity. Glyphosate does not cause embryotoxicity, fetotoxicity, infertility, or mutagenic effects.

**Potential Physical Hazards:** Can decompose at high temperatures forming irritating and toxic gases. Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas.

**Environmental Hazards:** Slightly to practically non-toxic to birds, fish, aquatic invertebrates, and bees. Toxic to non-target terrestrial and aquatic plant species. Keep out of waterways.

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name:</u>	<u>CAS Number:</u>	<u>(% w/w)</u>
Glyphosate Isopropylamine Salt	38641-94-0	41.0%
Other Ingredients		59.0%

## SECTION 4: FIRST AID MEASURES

### FIRST AID

<b>IF IN EYES</b>	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.
<b>IF INHALED</b>	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.
<b>IF SWALLOWED</b>	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 by a Poison Control Center or doctor. Do not give anything to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222, collect day or night, for emergency medical treatment information.

## SECTION 5: FIRE-FIGHTING MEASURES

### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Category	Rating*
Health	1
Flammability	0
Reactivity	1
*4=Severe    3=Serious    2=Moderate    1=Slight    0=Minimal	

**FLASH POINT (method):** Not flammable

**FLAMMABLE LIMITS:** Not applicable

**FIRE AND EXPLOSION HAZARD:** Thermal decomposition during a fire can produce fumes and irritating gases.

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## EXTINGUISHING MEDIA:

Use dry foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material. Minimize the use of water to avoid environmental contamination.

## FIRE FIGHTING INSTRUCTIONS:

Evacuate the area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire-extinguishing systems are preferred to prevent environmental damage with excessive water run off.

## FIRE FIGHTING EQUIPMENT:

Self-contained breathing apparatus with full face-piece. Equipment should be thoroughly decontaminated after use.

## HAZARDOUS COMBUSTION PRODUCTS:

Carbon monoxide, nitrogen oxides, and phosphorus oxides.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**SPILLS OR LEAKS:** Wear protective clothing as described in Section 8 of this SDS. Absorb liquid with material such as clay, sand, sawdust, or dirt. Sweep up and place in a suitable container for disposal and label the contents. Area can be washed down with a suitable solution of bleach or soda ash and an appropriate alcohol (methanol, ethanol, or isopropanol). Follow this by washing with a strong soap and water solution. Absorb any excess liquid as indicated above, and add to the disposal container. Keep product, contaminated materials and wash water out of streams and sewers. Wash exposed body areas thoroughly after handling.

## SECTION 7: HANDLING AND STORAGE

Keep out of reach of children. Do not contaminate water, food or feed by storage or disposal.

**HANDLING:** Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling this product. Spray solutions of this product should 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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**STORAGE:** Keep container closed to prevent spills and contamination. Keep in original containers, tightly closed, and out of reach of children and animals. Keep away from food, feedstuff and water supplies. Containers should be stored in a cool, dry, well-ventilated area and away from heat. Do not allow product to freeze. Compatible storage materials include stainless steel, aluminum, fiberglass, plastic, and glass lined containers. Incompatible storage materials include galvanized steel and unlined mild steel.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**EXPOSURE LIMITS:** (8 hour TLV): None established.

### MATERIAL:

Active Ingredient: Glyphosate  
Other Ingredients:

### OSHA PEL

Not established  
Not established

### ACGIH TLV

Not established  
Not established

**VENTILATION:** Provide general and/or local exhaust ventilation. Ventilate all transport vehicles prior to unloading.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, shoes plus socks, and protective eyewear.

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

### **User Safety Recommendations**

Users should:

- 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.

**Domestic Animals:** This product is considered to be relatively non-toxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

**Engineering Controls:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color:	Clear, slightly yellow
Physical State:	Liquid
Odor:	Mild
Specific Gravity:	1.178 g/cc @ 26° C
Solubility:	Completely soluble in water
Flash Point:	Not flammable
pH:	4.64 in an aqueous solution
Stability:	Stable
Partition Coefficient:	Log Pow = < 0.000 (active ingredient)

## SECTION 10: STABILITY AND REACTIVITY

<b>STABILITY:</b>	Stable, however may decompose if heated.
<b>CHEMICAL CONDITIONS TO AVOID:</b>	Avoid excessive heat and fire.
<b>INCOMPATIBILITY WITH OTHER MATERIALS:</b>	Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas.
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Carbon monoxide, nitrogen oxides, and phosphorus oxides.
<b>HAZARDOUS POLYMERIZATION:</b>	Product will not undergo polymerization.

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>ACUTE TOXICITY:</b>	
<b>ORAL (rat):</b>	The oral LD50 is 5,000 mg/kg.
<b>DERMAL (rabbit):</b>	The dermal LD50 is > 5,000mg/kg.
<b>INHALATION (rat):</b>	The inhalation LC50 (4 hrs.) is 2.6 mg/L.
<b>EYE IRRITATION (rabbit):</b>	Causes mild eye irritation; clears in 7 days.
<b>SKIN IRRITATION (rabbit):</b>	Causes mild skin irritation.
<b>SKIN SENSITIZATION (guinea pig):</b>	Non-sensitizer.

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## 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 or rinseate.

**ENVIRONMENTAL FATE:** Glyphosate is considered to be non-persistent in soils with a median half-life ranging from 1.85 to 2.06 days. It is strongly absorbed to soils and does not pose a threat to groundwater contamination. Studies indicate that glyphosate has a very low potential for bioaccumulation.

## SECTION 13: DISPOSAL CONSIDERATIONS

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

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

**CONTAINER DISPOSAL:** Non-refillable containers. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling or reconditioning, if appropriate, or 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.

**Non-refillable container less than or equal to 5 gallons:** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Non-refillable container greater than 5 gallons:** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over on its other end and tip back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows (all sizes):** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable container (250 gallon & Bulk):** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the

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responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

## SECTION 14: TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** Not regulated by DOT. None

**HAZARD CLASS OR DIVISION:** None

**IDENTIFICATION NUMBER:** Not applicable

**PACKING GROUP - ADDITIONAL INFORMATION:** None

## SECTION 15: REGULATORY INFORMATION

**FIFRA INFORMATION:** This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for the workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

**CAUTION:** Harmful if inhaled. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes or clothing.

Regulations under FIFRA: All pesticides are governed under FIFRA(Federal insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/ formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

### OSHA HAZARD

**COMMUNICATION STANDARD STATUS:** Regulated

**CERCLA REPORTABLE QUANTITY:** Not Listed

### SARA TITLE III STATUS:

- 302 Extremely Hazardous Substance: Not Listed

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- 311/312 Hazard Categories: Immediate health hazard
- 313 Toxic Chemicals: Not Listed

**CLEAN AIR ACT:** Not Listed

**CLEAN WATER ACT:** Not Listed

**STATES:**

- California Proposition 65 Status: Not Listed

## SECTION 16: OTHER INFORMATION

This document is prepared pursuant to the OSHA Hazard Communication Standard (HCS) (29 CFR Part 1910.1200(g)), revised in 2012. In addition, other substances not "Hazardous" per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

**NOTICE:** The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state, and local laws and regulations. See SDS for health and safety information.

**Original Date:** March 1, 2007

**SDS Date:** May 22, 2015