



# Safety Data Sheet

Issue Date: 03-Feb-2009

Revision Date: 30-Oct-2015

Version 2

## 1. IDENTIFICATION

### Product Identifier

Product Name

**Glyphogan Plus herbicide**

### Other means of identification

SDS #

ADAMA-073

Registration Number(s)

EPA Reg. No. 66222-176

### Recommended use of the chemical and restrictions on use

Recommended Use

EPA registered pesticide.

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Makhteshim Agan of North America, Inc. (d/b/a ADAMA)  
3120 Highwoods Blvd., Suite 100  
Raleigh, NC 27604  
1-919-256-9300

### Emergency Telephone Number

Emergency Telephone (24 hr)

For fire, spill and/or leak contact INFOTRAC:  
1-800-535-5053 (North America) 1-352-323-3500 (International)  
For medical emergencies and health/safety inquiries, contact PROSAR:  
1-877-250-9291

## 2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information. The product contains no substances which, at their given concentration, are considered to be hazardous to health.

**Appearance** Light yellow to amber clear liquid

**Physical State** Liquid

**Odor** Amine-like

### Classification

Acute toxicity – Inhalation (Dusts/Mists)

Category 4

### Signal Word

Warning

**Hazard Statements**

Harmful if inhaled

**Precautionary Statements - Prevention**

Avoid breathing dust/mist

Use only outdoors or in a well-ventilated area

**Precautionary Statements – Response**

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a poison center/doctor if you feel unwell

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Isopropylamine salt of glyphosate	38641-94-0	41

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye Contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.
<b>Skin Contact</b>	IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Immediately call a poison center or doctor/physician. Do not induce vomiting, unless directed by medical personnel. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects**

<b>Symptoms</b>	Direct contact with eyes may cause temporary irritation. Ingestion may cause symptoms of gastrointestinal irritation including abdominal discomfort, nausea, vomiting, and diarrhea.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**Water spray (fog). Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Not determined.

**Hazardous Combustion Products** Nitrogen oxides (NOx). Carbon monoxide. Phosphorus oxides.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

- Personal Precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.
- Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

**Methods and material for containment and cleaning up**

- Methods for Containment** Prevent further leakage or spillage if safe to do so.
- Methods for Clean-Up** Absorb with inert material, and then place in suitable container for chemical waste. Clean the floor with detergent and water. Do not flush to sewer.

**7. HANDLING AND STORAGE****Precautions for safe handling**

- Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse. Use in accordance with product label instructions. Do not eat, drink, smoke, or apply cosmetics while handling this product. Do not breathe dust/fume/gas/mist/vapors/spray. Follow all product label instructions. Use only as directed.

**Conditions for safe storage, including any incompatibilities**

- Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children. Keep/store only in original container. Store at ambient conditions. Do not contaminate water, food, or feed by storage or disposal. Store above 10°F. If allowed to crystallize, place in a warm room at 68°F (20°C) for several days to redissolve and roll or shake container or recirculate in mini-bulk or bulk container to mix well before using.
- Incompatible Materials** Strong oxidizing agents. Strong bases. Mild steel. Galvanized metal.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

The following information is given as general guidance

**Appropriate engineering controls**

- Engineering Controls** Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Wear safety glasses with side shields (or goggles). Goggles are recommended.
<b>Skin and Body Protection</b>	Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear long-sleeved shirt, long pants, and shoes plus socks. Use chemical resistant gloves, such as P.V.C., butyl-rubber, nitrile-rubber, or neoprene.
<b>Respiratory Protection</b>	NIOSH-approved respirator or mask in the absence of adequate ventilation.
<b>General Hygiene Considerations</b>	Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. 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.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Amine-like
<b>Appearance</b>	Light yellow to amber clear liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Clear light yellow to amber		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	4.5-5.5		
<b>Melting Point/Freezing Point</b>	Not determined		
<b>Boiling Point/Boiling Range</b>	Not determined		
<b>Flash Point</b>	> 100 °C / > 212 °F		
<b>Evaporation Rate</b>	Not determined		
<b>Flammability (Solid, Gas)</b>	Liquid-not applicable		
<b>Upper Flammability Limits</b>	Not determined		
<b>Lower Flammability Limit</b>	Not determined		
<b>Vapor Pressure</b>	Not determined		
<b>Vapor Density</b>	Not determined		
<b>Specific Gravity</b>	Not determined		
<b>Water Solubility</b>	Not determined		
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Auto-ignition Temperature</b>	Not determined		
<b>Decomposition Temperature</b>	Not determined		
<b>Kinematic Viscosity</b>	55.955 (20°C); 22.755 (40°C) cSt		
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	Not determined		
<b>Oxidizing Properties</b>	Not determined		
<b>Density</b>	1.171 g/mL @ 20°C		

**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid**

Keep out of reach of children.

**Incompatible Materials**

Strong oxidizing agents. Strong bases. Mild steel. Galvanized metal.

**Hazardous Decomposition Products**

Nitrogen oxides (NOx). Phosphorous oxides. Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

**Eye Contact** Avoid contact with eyes.

**Skin Contact** Avoid contact with skin.

**Inhalation** Harmful if inhaled.

**Ingestion** Do not ingest.

**Component Information** Not available

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Product Information (Numerical measures of toxicity)**

**Acute Oral LD50 (Rat):** >5,000 mg/kg

**Acute Dermal LD50 (Rabbit):** >5,000 mg/kg

**Acute Inhalation LC50 (Rat):** >2.5 mg/L (4-hr)

**Eye Irritation:** Moderately irritating.

**Dermal Irritation:** Mildly irritating.

**Dermal Sensitization:** Not a skin sensitizer.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Toxic to aquatic life with long lasting effects. 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.

**Component Information** Not available

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods****Disposal of Wastes**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION****DOT**

Not regulated

**IATA**

Not regulated

**IMDG****Marine Pollutant**

This material may meet the definition of a marine pollutant

**15. REGULATORY INFORMATION****International Inventories**

Listed or exempt.

**US Federal Regulations****SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**SARA 313**

Not determined

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Not determined

**EPA Pesticide Registration Number** 66222-176**EPA Statement**

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 workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**EPA Pesticide Label**

Signal Word: Caution

Causes moderate eye irritation. Harmful if swallowed or inhaled. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling.

**Difference between SDS and EPA pesticide label**

	EPA	OSHA
<b>Signal Word</b>	Caution	Warning
Acute toxicity - Oral	Harmful if swallowed	N/A
Acute toxicity - Inhalation	Harmful if inhaled	Harmful if inhaled
Serious eye damage/eye irritation	Causes moderate eye irritation	N/A

**16. OTHER INFORMATION****NFPA****Health Hazards****Flammability****Instability****Special Hazards**

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None

**HMIS****Health Hazards****Flammability****Physical Hazards****Personal Protection**

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See section 8

**Issue Date:**

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30-Oct-2015

**Revision Note:**

Updated format from 11-Nov-2014

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**