



Material Safety Data Sheet

NFPA	Transport Symbol
	Not regulated

Preparation Date 01-Feb-2010

Revision Date 04-Mar-2010

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code 2174112
Product Name GLYFINE PLUS HERBICIDE
Synonyms Glycine, N-(Phosphonomethyl)-, Compd. with 2-Propanamine (1:1); Glyphosate Isopropylamie
Formula C3H9N.C3H8NO5P
CAS Number 38641-94-0
EPA Registration Number 2749-537
Contact
ACETO AGRICULTURAL
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2. HAZARDS IDENTIFICATION

Emergency Overview

Harmful by inhalation. Harmful if swallowed. May be harmful in contact with skin. Irritant.

Appearance Amber, Brown.

Physical State Liquid.

Odor Slight

OSHA Regulatory Status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Mexico - Grade Not available

Potential Health Effects

Principle Routes of Exposure Eye contact, Skin contact, Inhalation, Ingestion.

Acute Effects

Eyes	Irritating to eyes. Avoid contact with eyes.
Skin	May be harmful by skin contact. Irritating to skin. Avoid contact with skin.
Inhalation	Harmful by inhalation. Irritating to mucous membranes. Irritating to respiratory system. Avoid breathing vapors or mists.
Ingestion	Harmful if swallowed. Gastrointestinal disturbance. Do not ingest. Nausea. Vomiting. Diarrhea. Hypotension. Increased fluid in lungs (lung/pulmonary oedema).

Additional Acute Effects None reasonably foreseeable.

Chronic Effects Avoid repeated exposure.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Not available

Interactions with Other Chemicals Not available

Potential Environmental Effects See Section 12 for additional Ecological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number 38641-94-0

Formula C3H9N.C3H8NO5P

Hazardous Components

Chemical Name	CAS-No	Weight %
Isopropylamine Salt of Glyphosate	38641-94-0	30 - 60

Non-hazardous Components

Chemical Name	CAS-No	Weight %
Other Ingredients	N/A	30 - 60

4. FIRST AID MEASURES

General Advice

Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician or Poison Control Centre immediately.

Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Call a physician or Poison Control Centre immediately.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician or Poison Control Centre immediately.
Ingestion	Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Centre immediately.
Notes to Physician	Treat symptomatically.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not available
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO2). Dry chemical. Foam.
Unsuitable Extinguishing Media	Not available
Hazardous Combustion Products	Thermal decomposition or combustion may produce hazardous gases and/or materials.

Explosion Data

Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition

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

<u>NFPA</u>	Health 2	Flammability 1	Instability 1
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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental Precautions	Local authorities should be advised if significant spillages cannot be contained. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

Methods for Containment	Not available
Methods for Cleaning up	Evacuate personnel to safe areas. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Clean contaminated surface thoroughly.
Other Information	Not applicable

7. HANDLING AND STORAGE

Handling	Use only in an area equipped with a safety shower. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Avoid repeated exposure.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Controls	Ensure adequate ventilation, especially in confined areas
Personal Protective Equipment	
Eye/face Protection	Tightly fitting safety goggles
Skin Protection	Wear protective gloves/clothing.
Respiratory Protection	In case of insufficient ventilation wear suitable respiratory equipment.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. For additional information consult the EPA Pesticide Label.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber, Brown	
Physical State	Liquid	
Odor	Slight	
pH	4.4 - 5.0	
Flash Point	Not available	
Autoignition Temperature	Not available	
Boiling Point/Range	Not available	
Melting Point/Range	Not available	
Flammability Limits in Air	Lower Not available	Upper Not available
Vapor Pressure	Not available	

Vapor Density	Not available
Specific Gravity	1.17 g/cm ³
Water Solubility	Soluble
Reactivity in Water	Not available
Partition Coefficient (n-octanol/water)	-3.02@25°C (Glyphosate)
Molecular Weight	Not available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Heat, flames and sparks. Do not store in galvanized steel or unlined steel (except stainless steel) containers. Contact with metal may evolve flammable hydrogen gas.
Incompatible Materials	Metals. Oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide, Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Oxides of phosphorus.
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50 Oral:	> 5,000 mg/kg (rat)
LD50 Dermal:	>5,000 mg/kg (rabbit)
LC50 Inhalation:	2.6mg/L 4H (rat)

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropylamine Salt of Glyphosate	= 10537 mg/kg Oral LD50 Rat		

Chronic Toxicity

Carcinogenicity	There are no known carcinogenic chemicals in this product
Irritation	Skin,rabbit: Slight ; Eye,rabbit: Moderate
Corrosivity	Not available
Sensitization	Not available
Neurological Effects	Not available

Mutagenic Effects	Not available
Reproductive Effects	Not available
Developmental Effects	Not available
Target Organ Effects	Eyes, Skin, Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants

Isopropylamine Salt of Glyphosate

Water Flea Data

48 Hr EC50 water flea: 3.0 mg/L [Static]

Persistence / Degradability	Not available
Bioaccumulation / Accumulation	Not available
Mobility in Soil	Not available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of in accordance to EPA Pesticide Label Instructions.
Contaminated Packaging	Dispose of in accordance to EPA Pesticide Label Instructions.
US EPA Waste Number	Not available

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated
<u>RID</u>	Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

U.S.A. (TSCA) Does not Comply
Canada (DSL) Does not Comply
EU (ELINCS) Does not Comply
EU (EINECS) Does not Comply
Japan (ENCS) Does not Comply
China Does not Comply
Korea (KECL) Does not Comply
Philippines (PICCS) Does not Comply
Australia (AICS) Does not Comply

Chemical Name	U.S.A. (TSCA)	Canada (DSL)	EU (EINECS)	EU (ELINCS)
Isopropylamine Salt of Glyphosate	-	Present	254-056-8	-
Other Ingredients	-	-	-	-

Chemical Name	Japan (ENCS)	China	Korea (KECL)	Philippines (PICCS)	Australia (AICS)
Isopropylamine Salt of Glyphosate	2-3067 2-3067	Present	-	-	Present
Other Ingredients	-	-	-	-	-

This material as a whole is exempt from the TSCA Inventory // FIFRA Regulated Pesticide

USA

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

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

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

Prepared By	Environmental Health and Safety, Regulatory Affairs
Preparation Date	01-Feb-2010
Revision Date	04-Mar-2010
Revision Summary	Not available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS