

| Product Code Product Name Synonyms | 2175312 GLYFINE 5 PLUS HERBICIDE Glycine, N-(Phosphonomethyl)-, Compd. with 2-Propanamine (1:1); Glyphosate |
|--|---|
| Formula | Isopropylamie C3H9N.C3H8NO5P |
| CAS Number | 38641-94-0 |
| EPA Registration Number | 2749-552 |
| Contact | |
| ACETO AGRICULTURAL | |
| CHEMICALS CORP. | |
| One Hollow Lane | |
| Lake Success, NY 11042-1215 | |
| Phone: (516) 627-6000 | |
| Fax: (516) 627-6093 | |
| Email: regulatory@aceto.com | |
| ChemTrec Emergency Telephone | 1-800-424-9300 |
| Numbers | 1-703-527-3887 |

2. HAZARDS IDENTIFICATION

| | Emergency Overview harmful if inhaled. May be harmful in contact with skin. Irrita e irritation of respiratory tract. May cause irritation of the mu | |
|--------------------------|---|---------------------|
| Appearance Yellow. | Physical State Liquid. | Odor Slight |
| OSHA Regulatory Status | This material is considered hazardous by the OSHA Ha Standard (29 CFR 1910.1200). | azard Communication |
| 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. Substance may cause slight skin irritation. Avoid contact with skin. | |
| Inhalation | May be harmful by inhalation. May cause irritation of the mucous membranes. Ma cause irritation of respiratory tract. Avoid breathing vapors or mists. | |
| Ingestion | Harmful if swallowed. Gastrointestinal disturbance. Nausea. Vomiting. Diarrhea. Hypotension. Increased fluid in lungs (lung/pulmonary oedema). Do not ingest. | |
| Additional Acute Effects | None reasonably foreseeable. | |
| Chronic Effects | Avoid repeated exposure. | |
| See Section 11 for additional Toxic | ological 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 | 53.8 |

Non-hazardous Components

| Chemical Name | CAS-No | Weight % |
|-------------------|--------|----------|
| Other Ingredients | N/A | 46.2 |

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 b 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

| NFPA | Health 2 | Flammability 1 | Instability 1 |
|------|----------|----------------|---------------|
| | | | |

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. |
|----------|---|
| | |

StorageKeep 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 | Yellow |
|--------------------------|---------------|
| Physical State | Liquid |
| Odor | Slight |
| рН | 5.0 |
| Flash Point | Not available |
| Autoignition Temperature | Not available |
| Boiling Point/Range | Not available |
| Melting Point/Range | Not available |
| | |

| Flammability Limits in AirLower Not availableVapor PressureNot availableVapor DensityNot availableSpecific Gravity1.23 g/cm³Water SolubilitySoluble | | Upper Not available | | | | | | |
|---|-------------------------------|---|--|--|---|-------------------------|--|--|
| | | | | | Reactivity in Water | Not available | | |
| | | | | | Partition Coefficient (n- octanol/water) | -3.02@25°C (Glyphosate) | | |
| Molecular Weight | olecular Weight Not available | | | | | | | |
| | 10. STABILITY AN | D REACTIVITY | | | | | | |
| Chemical Stability | Sta | ble under normal conditions | | | | | | |
| Conditions to Avoid | unl | at, flames and sparks. Do not store in galvanized steel or ined steel (except stainless steel) containers. Contact n metal may evolve flammable hydrogen gas. | | | | | | |
| Incompatible Materials | Ме | tals. Oxidizing agents. | | | | | | |

Incompatible Materials

Hazardous Decomposition Products

None under normal processing

(NOx), Oxides of phosphorus.

Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides

Possibility of Hazardous Reactions

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

| LD50 Oral: | > 5,000 mg/kg (rat) |
|------------------|------------------------|
| LD50 Dermal: | > 5,050 mg/kg (rabbit) |
| LC50 Inhalation: | > 2.21mg/L (rat) |

Component Information

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

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product Irritation Eye,rabbit: MOD 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 / DegradabilityNot availableBioaccumulation / AccumulationNot availableMobility in SoilNot 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

| DOT | Not regulated |
|----------|---------------|
| TDG | Not regulated |
| MEX | Not regulated |
| ICAO | Not regulated |
| IATA | Not regulated |
| IMDG/IMO | Not regulated |

| | 15. REGULATORY INFORMATION |
|-----|----------------------------|
| ADN | Not regulated |
| ADR | Not regulated |
| RID | Not regulated |
| | |

| International Inventorie | S | | | | | |
|--------------------------|---------------|-----------------|-------------|-------------|--|--|
| U.S.A. (TSCA) | Does not Co | omply | | | | |
| Canada (DSL) | Does not Co | omply | | | | |
| EU (ELINCS) | Does not Co | omply | | | | |
| EU (EINECS) | Does not Co | omply | | | | |
| Japan (ENCS) | Does not Co | Does not Comply | | | | |
| China | Does not Co | Does not Comply | | | | |
| Korea (KECL) | Does not Co | Does not Comply | | | | |
| Philippines (PICCS) | Does not Co | Does not Comply | | | | |
| Australia (AICS) | Does not Co | Does not Comply | | | | |
| Chemical Name | U.S.A. (TSCA) | Canada (DSL) | EU (EINECS) | EU (ELINCS) | | |
| Isopropylamine Salt of | - | Present | 254-056-8 | - | | |
| Glyphosate | | | | | | |
| 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. | |

Thi

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 Preparation Date Revision Date Revision Summary Disclaimer Environmental Health and Safety, Regulatory Affairs 06-Jan-2011 06-Jan-2011 Not available

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