



Safety Data Sheet

Report Date 18-Nov-15

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1. Identification

Product Name : HOSS ULTRA
Synonyms : None
Product Use : Isopropylamine Salt of Glyphosate
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Slightly irritating to skin in laboratory tests
Eye Irritation : Slight to moderate irritation in laboratory tests
Acute Toxicity Oral : LD50 >5,000 mg/kg (rat)
Acute Toxicity Dermal : LD50 >5,000 mg/kg (rat)

Hazard Categories : Oral/Dermal/Inhalation Toxicity-5/5/4; Eye/Skin Irritation-2A/3;

Hazard Statement : May be harmful if swallowed
May be harmful in contact with skin
Harmful if inhaled
Causes mild skin irritation
Causes serious eye irritation

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Isopropylamine Salt of Glyphosate	38641-94-0	41.00
Inert ingredients	Proprietary	59.00

4. First Aid Measures

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

Skin : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation : Move person to fresh air. If 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.

Ingestion : 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 do so by the poison control center or doctor. Do not give anything by mouth if unconscious.

Indication of Immediate Medical Attention and Special Treatment Needed : First aid responders should use protective equipment listed in Section 8 if there is a potential for exposure to product. Treat symptomatically.

5. Fire Fighting Measures



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- Extinguishing Media** : Use water spray, foam or dry chemical. Wear self-contained breathing apparatus with full facepiece and full firefighting turnout gear.
- Specific Hazards Arising from the Chemical** : May decompose in fire due to releasing irritating or toxic gases including carbon monoxide, nitrogen oxides, phosphorus oxides.
- Special Fire Fight Proc** : Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam or dry chemical extinguishing systems are recommended to prevent environmental damage due to water runoff.

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, waterproof gloves, long-sleeved shirt and long pants, shoes plus socks. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Clean up spills immediately. Do not allow spilled material or washwaters to enter any waterways.
- Methods and Materials for Containment and Cleanup** : Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal. 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, then scrape up for disposal. After removal, scrub the area with detergent and water and neutralize with dilute alkaline solutions of soda ash or lime. Collect washwaters for disposal.

7. Handling and Storage

- Precautions for Safe Handling** : Keep out of reach of children. Use only in well-ventilated area. Wear appropriate safety equipment when handling.
- Conditions for Safe Storage** : Store in original container with lid tightly closed. Keep away from food, feed and drinking water. Stored above 15 Degrees F (-10 Degrees C.). If crystallized, warm to 80 Degrees F. to 90 Degrees F. and redissolve by shaking container before using product.

8. Exposure Controls / Personal Protection

- TLV/PEL** : No TLV or PEL established for active ingredient, isopropylamine salt of glyphosate.
- Appropriate Engineering Controls** : Local mechanical exhaust ventilation may be required.
- Personal Protective Equipment** : Splashproof goggles or face shield, waterproof gloves, long-sleeved shirt and long pants, shoes plus socks. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

- Odor/Appearance** : Clear yellow viscous liquid;slight amine like odor
- Flash Point, °F** : Will not flash
- Boiling Point, °F** : No data available
- Melting Point(Freezing point), °C** : Not determined
- Vapor Pressure, mm Hg @ 20 °C** : 25 mmHg @ 24 Degrees C.
- Vapor Density** : Not applicable
- Solubility in Water** : Emulsifies
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.15-1.21



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Evaporation Rate(Butyl Acetate = 1) : Not determined
Octanol/Water Partition Coefficient : log Pow $-<3.2$ @ 25C (glyphosate)
pH : 4.74
Flammable Limits (approximate volume % in air) : No information found
Auto-ignition Temperature : No data available
Decomposition temperature : No data

10. Stability and Reactivity

Reactivity : See Incompatible Materials.
Chemical Stability : Stable
Hazardous Decomposition Products : Carbon monoxide, nitrogen oxides, phosphorus oxides due to thermal breakdown.
Hazardous Polymerization : Will not occur
Conditions to Avoid : Avoid temperatures above 115 Degrees F and below 25 Degrees F.
Incompatible Materials : Strong oxidizers/bases, mild/galvanized steel. May react with metals (galvanized/mild steel) to form hydrogen gas; may form highly combustible gas mix

11. Toxicological Information

Acute Toxicity (Oral LD50) : $>5,000$ mg/kg. May be harmful if swallowed.
Acute Toxicity (Dermal LD50) : $>5,000$ mg/kg. May be harmful in contact with skin.
Acute Toxicity Inhalation LC50 : >2.2 mg/L. Harmful if inhaled.
Likely Routes of Exposure : Inhalation, skin, eyes, ingestion.
Skin Irritation : Causes mild skin irritation.
Eye Irritation : Causes serious eye irritation.
Skin Sensitization : Non-sensitizer.
Carcinogenic : IARC Category 2A but not carcinogen based on expert opinion evaluating weight of evidence.
Chronic Effects : No information found.
Other Hazards : Developmental Toxicity: effects on offspring only noted with maternal toxicity. No evidence of mutagenicity during in vivo or in vitro studies.

12. Ecological Information

Ecotoxicity : For glyphosate acid: Bee Toxicity, contact LD50 >100 ug/bee; Fish Toxicity, 96-hour LC50 (rainbow trout) 5.4 mg/L.
Persistence and Degradability : No information found
Bioaccumulative Potential : Bioaccumulation (whole fish BCF) <1 . Soil half-life= $2-174$ days (adsorbs strongly to soil). Water half-life <7 days.
Mobility in Soil : No information found.
Other Adverse 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 or rinsate.

13. Disposal Considerations

Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.



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14. Transport Information

UN Proper Shipping Name : Not regulated by DOT, IATA or IMDG.
Transport Hazard Class : None
UN Identification Number : None
Packaging Group : None
Environmental Hazards : No information found
Transport in Bulk : No information found
Special Precautions for Transportation : No information found
Freight Classification : Pesticides, NOI, Herbicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

15. Regulatory Information

National Fire Protection Association Rating :
Health: 1 Fire: 0 Reactivity: 1
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

S.A.R.A Title III Hazard Classification (Yes/No) :
Immediate(Acute) Health: Y
Delayed (Chronic) Health: N
Sudden Release of Pressure: N
Fire: N
Reactive: N

FIFRA Information : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling 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 Registration Number : 42750-61-5905
FIFRA Signal Word : Caution
FIFRA Label Statement : Keep out of reach of children.
FIFRA Label Statement : Causes moderate eye irritation.
FIFRA Label Statement : Avoid contact with eyes or clothing.
FIFRA Label Statement : Wash thoroughly with soap and water after handling.
FIFRA Label Statement : No additional label statements.
FIFRA Label Statement : No additional label statements.
FIFRA Label Statement : No additional label statements.

16. Other Information

Data of Preparation/Revision : 18-November-2015