SAFETY DATA SHEET

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

1. IDENTIFICATION

PRODUCT NAME: HDX™ Weed and Grass Killer Concentrate

DESCRIPTION: A liquid herbicide. EPA Reg. No.: 86068-3-84009 COMPANY IDENTIFICATION:

Ragan & Massey, Inc. 101 Ponchatoula Parkway Ponchatoula, LA 70454

2. HAZARD IDENTIFICATION



WARNING

Causes serious eye irritaiton Harmful if inhaled Toxic to aquatic life

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common NameChemical NameCAS #CompositionGlyphosate IPA SaltN-(phosphonomethyl)glycine, isopropylamine salt38641-94-041.0%

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact the National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information. You may also contact Chemtrec® at 1-800-424-9300 day or night, for chemical emergency, spill, leak, fire, exposure, or accident. This product is identified as HDX™ Weed and Grass Killer Concentrate, EPA Reg. No. 86068-3-84009.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 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. If eye irritation persists: Get medical advice/attention.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a doctor or poison control center if you feel unwell.

5. FIREFIGHTING MEASURES

Flash Point: N/A

Flammable Limits: Not determined

Fire and Explosion Hazards: Product may generate irritating or toxic gasses through thermal

decomposition.

Extinguishing Medium: Water spray, dry foam, CO₂, or dry chemical

Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Evacuate area and fight fire from a safe distance upwind. A foam or dry chemical fire extinguishing system is preferred to prevent environmental damage from excessive water runoff. If water is used, avoid heavy hose streams. If possible, dike and collect water used to fight fire to prevent/minimize run off.

Hazardous Combustion Products: Oxides of carbon, nitrogen, and phosphorus.

NFPA Ratings: Health - 2 / Flammability - 1 / Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately. Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8 of this SDS. Keep unprotected persons and animals out of area.

Small Spills: Absorb spill with inert material such as dry sand, vermiculite or fuller's earth, then place in a chemical waste container.

Large Spills: 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 and scrape up for disposal. After removal, scrub the area with detergent and water and neutralize with dilute alkaline solutions of soda ash and lime.

7. HANDLING AND STORAGE

Keep out of reach of children.

Handling: Do not get in eyes or on clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

Storage: Store in original container in a safe place away from direct sunlight. Store above 10°F (-12°C) to keep product from crystallizing. Do not contaminate water, foodstuff, feed or seed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment: Wear long-sleeved shirt and long pants, shoes plus socks, and safety glasses or chemical goggles.

General: Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear, viscous green or yellow liquid

Odor: Slight odor

pH: 4.64

Specific Gravity: 1.178 g/mL Solubility: Soluble in water

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Excessive heat. Do not store near heat or flame.

CHEMICAL STABILITY: This product is stable under normal handling and storage conditions.

INCOMPATIBILITY WITH OTHER MATERIALS: Galvanized steel or unlined steel, strong oxidizers and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Heat and fire may result in thermal decomposition and the release oxides of carbon, nitrogen, and phosphorus.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

The following information is for a similar product formulation:

ORAL TOXICITY (rat LD₅₀): > 5,000 mg/kgDERMAL TOXICITY (rat LD₅₀): > 5,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): > 2.05 mg/L (4-hour)

EYE IRRITATION: Rabbit – Moderately irritating, may cause corneal injury

SKIN IRRITATION: Rabbit – Non-irritating **SKIN SENSITIZATION:** Not a contact sensitizer

CARCINOGENICITY: EPA: Not Listed

ACGIH: Not Listed NTP: Not Listed IARC: Not Listed OSHA: Not Listed

MUTAGENIC TOXICITY: No evidence of mutagenic effects during in vivo and in vitro assays.

REPRODUCTIVE TOXICITY: Not known to cause reproductive or birth defects at normal exposure levels.

12. ECOLOGICAL INFORMATION

Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

Available data suggests that the active ingredient, Glyphosate acid, is slightly to moderately toxic to aquatic organisms and practically non-toxic to avian species, honey bees and earthworms.

The following information is for the active ingredient, Glyphosate acid:

AQUATIC TOXICITY

Rainbow Trout (96-hr LC₅₀): 8.2 mg/L Bluegill (96-hr LC₅₀): 5.8 mg/L Daphnia (48-hr LC₅₀): 37 mg/L Algae (72-hr EC₅₀): 2.1 mg/L

AVIAN TOXICITY

Bobwhite Quail (8-day LC50): > 6,300 ppm Mallard Duck (8-day LC50): > 6,300 ppm

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Open dumping is prohibited. Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

US DOT:

Not regulated by DOT.

15. REGULATORY INFORMATION

FIFRA -

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. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear safety glasses. Harmful if inhaled. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal instructions.

ENVIRONMENTAL HAZARDS

Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III - Section 302 Extremely Hazardous Substances

Not listed

SARA Title III - Section 311/312 Hazard Categories

Immediate

SARA Title III - Section 312 Threshold Planning Quantity

N/A

SARA Title III – Section 313 Reportable Ingredients

None

CERCLA Reportable Quantity (RQ) -

None

CALIFORNIA PROP 65 STATUS -

This product does not contain any chemical known to the state of California to cause cancer or reproductive harm.

CANADA -

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

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Ragan and Massey, Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Ragan and Massey, Inc. be responsible for damages of any nature whatsoever resulting from the use or of reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

SDS Version: 1.0 Effective Date: 09/23/2015