

CropSmart™ Glyphosate 41% Extra MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CropSmart™ Glyphosate 41% Extra

GENERAL USE: Herbicide

PRODUCT DESCRIPTION: Clear-amber liquid. Slight-amine-like odor.

EPA Registration Number: 85945-1

Current Revision Date: January 27, 2015

MANUFACTURER EMERGENCY TELEPHONE NUMBERS:

CropSmart, LLC: 870-222-5343

CHEMTREC: 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	%	OSHA PEL	ACGIH TLV	NTP/IARC/OSHA Carcinogen
Glyphosate, Iso-propylamine Salt	38641-94-0	41%	Not established	Not established	No
Surfactant	proprietary	15%			

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Hazardous chemical. Do not mix store or apply this product or spray solutions of this product in galvanized or unlined steel (except stainless steel) containers or spray tanks. Storage in metal containers other than stainless steel may cause the liberation of hydrogen gas. May cause severe but temporary eye irritation. Emergency personnel should wear a self-contained breathing apparatus because noxious fumes are produced under fire conditions. Material is moderately toxic to fish and aquatic plants. May be toxic to not-target plants.

KEEP OUT OF REACH OF CHILDREN

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause severe irritation with redness and tearing.

SKIN: A single dose exposure to the material is slightly toxic and irritating.

Ingestion: Single dose oral toxicity is low. Amounts ingested incidental to normal handling conditions are not likely to cause injury. Ingestion may cause gastrointestinal discomfort with irritation of the mouth, nausea, vomiting and diarrhea.

INHALATION: Single exposure to vapors is not likely to be hazardous. Avoid breathing vapors or mist.

SYSTEMIC (OTHER TARGET ORGANS) EFFECTS: Signs and symptoms of excessive exposure may be nausea and/or vomiting and abdominal cramps and/or diarrhea. Birth defects are unlikely to occur.

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4. FIRST AID MEASURES

INGESTION: May cause gastrointestinal tract irritation. Give a large glass of milk or water and contact a physician or poison control center immediately.

EYE CONTACT: Flush eyes with water immediately and continuously for 15 minutes. Consult a physician if irritation persists.

SKIN CONTACT: Wash skin with plenty of soap and water for 15 minutes. Remove contaminated clothing and wash before reuse. Consult a physician if irritation develops.

INHALATION: Remove to fresh air. Consult a physician if irritation develops or breathing is difficult.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION

Flash Point (Test Method): Did not flash.

Flammable Limits (% in Air): Not established.

Autoignition Temperature: Not established.

HAZARDOUS COMBUSTION PRODUCTS: Noxious fumes produced under fire conditions may include carbon monoxide, carbon dioxide, phosphorus oxides, and nitrogen oxides.

EXTINGUISHING MEDIA: Water spray, foam, fog, or dry chemical. Do not allow runoff to enter sewers or waterways.

FIRE FIGHTING INSTRUCTIONS: Prevent human exposure to fire, fumes, and smoke. Avoid heavy hose streams and dike area to prevent runoff.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Emergency personnel should wear full face, self-contained breathing apparatus and full firefighting turnout gear.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR LEAK: Contain spill. Absorb spill with sand, floor clay or dirt. Shovel or sweep up and mop affected area with soap and water. Prevent liquid from entering sewers and waterways. Large spills that soak into the ground should be dug up, placed in drums and disposed of properly.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Good housekeeping is necessary. No smoking, open flames or sources of ignition in handling and storage area. Wash thoroughly with soap and water after handling. Wash contaminated clothing before reuse. Do not contaminate water, food or feed by storage or disposal. Do not store near seeds, fertilizers, insecticides or fungicides. Spray solutions of the product should be mixed, stored, and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

These precautions are suggested for conditions with a high potential for exposure. If handling procedures are such that there is only a low potential for exposure, less protection may be needed. Emergency conditions may require additional precautions.

ENGINEERING CONTROLS: Handle in a well-ventilated area. Eyewash stations and safety showers should be easily accessible.

EYE CONTACT: Use chemical goggles or face shield. Eye wash station should be located in the immediate work area.

SKIN CONTACT: Use waterproof gloves where danger of exposure exists. Use protective clothing impervious to this material. Avoid direct contact with skin.

INHALATION: Use a NIOSH approved respirator when protection is required.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: Clear yellow to amber liquid.

Odor: Slight amine-like odor.

Freeze Point: 14°F

Flash Point: >113°C >235°F (Pensky Martens closed tester)

Weigh per gallon: 9.75 lbs. per gallon.

Specific Gravity/Density: 1.16 / 9.75

pH: 4.5 (1% solution in water).

10. STABILITY AND REACTIVITY

REACTIVITY

STABILITY: Stable under normal conditions. May decompose if heated. Avoid temperatures above 115°F (46°C) and below 25°F (-5°C).

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Do not mix, store, or apply this product or stray solutions of this product in galvanized or unlined steel containers or spray tanks. This product could react with these containers to liberate hydrogen gas, which may form a highly combustible gas mixture.

MATERIALS TO AVOID: Caustic materials (bases), mild and galvanized or unlined steel containers.

HAZARDOUS DECOMPOSITION PRODUCTS: Phosphorus oxides, nitrogen oxides and carbon oxides under fire conditions.

11. TOXICOLOGICAL INFORMATION

INGESTION: LD₅₀ (rat) > 5000 mg/kg

DERMAL: LD₅₀ (rat) > 5000 mg/kg

INHALATION: LC₅₀ (rat 4 hr.) > 2.5 mg/L

EYE IRRITATION (rabbit): Moderate irritation

SKIN IRRITATION (rabbit): Mild

SENSITIZATION (guinea pig): Not a sensitizer

MUTAGENICITY: No evidence of mutagenic effects during in vivo or in vitro studies.

CARCINOGENIC POTENTIAL: Not listed by OSHA, NTP, or IARC.

TERATOLOGY (BIRTH DEFECTS): Birth defects are unlikely. Exposures having no effect on the mother should have no effect on the fetus. Did not cause birth defects in animals. Other effects were seen in the fetus only at doses, which caused toxic effects to the mother.

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12. ECOLOGICAL INFORMATION

Summary: Glyphosate has been shown to be slightly to moderately toxic in aquatic studies and has been shown to be practically non-toxic to avian species following sub-acute dietary exposure.

Fish Toxicity (Glyphosate acid):

96 hour LC₅₀ (rainbow trout): 8.2 mg/L

96 hour LC₅₀ (Bluegill): 5.8 mg/L

Avian Toxicity (Glyphosate acid):

Oral LD₅₀ (Bobwhite quail): > 3800 mg/kg

Bee: Non-toxic

13. DISPOSAL CONSIDERATION

DISPOSAL METHOD: Do not contaminate water, food or feed by storage or disposal. If waste cannot be disposed of by use according to label instructions, contact the appropriate state, local or federal agency for guidance on disposal according to current environmental laws, rules and regulations.

14. TRANSPORTATION INFORMATION

DOT : Not regulated.

B/L Freight Classification: Weed killing compound, N.O.I.B.N.

15. REGULATORY INFORMATION

NOTICE: The information herein is presented in good faith and believed to be accurate as of the issue or revision date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another, it is users responsibility to ensure that its activities comply with federal, state and local laws and regulations.

SARA TITLE III CLASSIFICATION

Section 311/312 Hazard Classes: Acute health hazard (immediate).

Section 313 chemical(s): Not Applicable.

TSCA STATUS: Components are listed on the TSCA inventory or are exempt from being listed on the TSCA inventory.

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 0
Reactivity: 1

0 Least
1 Slight
2 Moderate
3 High
4 Severe

DISCLAIMER: This information is provided for the limited guidance to the user. While CropSmart LLC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

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ABBREVIATIONS:

ACGIH - American Conference of Governmental Industrial Hygienists
BEI - Biological Exposure Index
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
EPA - Environmental Protection Agency
FIFRA - Federal Insecticide, Fungicide, and Rodenticide Act
IARC - International Agency for Research on Cancer
NFPA - National Fire Protection
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Agency
SARA - Superfund Amendments and Reauthorization Act
TSCA - Toxic Substances Control Act

This is the last page of this MSDS. There should be 5 pages.