

CropSmart, LLC

MATERIAL SAFETY DATA SHEET

CropSmart, LLC
901 Kildaire Farm Road
Cary, NC 27511
1-866-459-7467

In Case of Emergency, Call:
24 Hour Emergency Number
CHEMTREC: 800-424-9300

Medical Emergency Contact:
1-800-308-1241

1. CHEMICAL IDENTIFICATION

Product Name:	CropSmart Glyphosate 41 Plus	Product No.: 000121WT
EPA Signal Word	CAUTION	
EPA Reg. Number:	72693-1-85945	
Active Ingredient (%)	Glyphosate, isopropylamine salt (41.0 %)	
Chemical Name:	Glycine, N-(phosphonomethyl)-compd. with 2-propylamine (1:1).	
Chemical Class:	Herbicide.	

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	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. Clear-amber liquid. Slight-amine-like odor. 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.

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.

Physical Properties

Appearance: Clear-amber liquid.

Odor: Slight amine-like odor.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Acute Toxicity/Irritation Studies

Ingestion: LD50 (rat) > 5000 mg/kg

Dermal: LLD50 (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.

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. TRANSPORT 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

Issued Date: 1-5-11

Supersedes: 10-15-09

The information herein is presented in good faith and believed to be accurate as of the issue or revised date shown above. However, since the actual use of the product is beyond manufacturers control, no warranty, expressed or implied, is given and no responsibility assumed. Regulatory requirements governing this product are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure that the buyer's activities comply with federal, state and local laws.