

**Syngenta Crop Protection, Inc.**  
**Post Office Box 18300**  
**Greensboro, NC 27419**

**In Case of Emergency, Call**  
**1-800-888-8372**

**1. PRODUCT IDENTIFICATION**

Product Name: **TOUCHDOWN CF** Product No.: A12798R  
 EPA Signal Word: Caution  
 Active Ingredient(%): Glyphosate, N-(phosphonomethyl) glycine (28.3%) CAS No.: 1071-83-6  
 Chemical Name: Glyphosate, in the diammonium salt form  
 Chemical Class: A phosphonic acid herbicide  
 EPA Registration Number(s): 100-1157 **Section(s) Revised: 3, 9**

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Surfactant	Not Established	Not Established	Not Established	No
Surfactant	Not Established	Not Established	Not Established	No
Glyphosate, N-(phosphonomethyl) glycine (28.3%)	Not Established	Not Established	Not Established	No

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

**3. HAZARDS IDENTIFICATION**
Symptoms of Acute Exposure

A mild eye and skin irritant.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Flammable hydrogen gas may be formed on contact with incompatible metals. See "Conditions to Avoid", Section 10.

Physical Properties

Appearance: Red liquid

Odor: Odorless

Unusual Fire, Explosion and Reactivity Hazards

This product may form flammable and explosive hydrogen gas when in contact with galvanized or unlined steel.

**4. FIRST AID MEASURES**

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center

or doctor for treatment advice.

**Skin Contact:** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

**Inhalation:** If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

#### Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

#### Medical Condition Likely to be Aggravated by Exposure

None known.

## **5. FIRE FIGHTING MEASURES**

### Fire and Explosion

Flash Point (Test Method): > 220°F  
Flammable Limits (% in Air): Lower: % Not Applicable Upper: % Not Applicable  
Autoignition Temperature: > 1202 °F  
Flammability: Not flammable

### Unusual Fire, Explosion and Reactivity Hazards

This product may form flammable and explosive hydrogen gas when in contact with galvanized or unlined steel.

### In Case of Fire

Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

## **6. ACCIDENTAL RELEASE MEASURES**

### In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. If a solid, sweep up material and place in a compatible disposal container. If a liquid, cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

## **7. HANDLING AND STORAGE**

Spray solutions of this product should be mixed, stored and applied using only plastic, plastic-lined steel, stainless steel or fiberglass containers. Concentrate should not be stored in galvanized steel, carbon steel, aluminum or unlined steel containers. Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.**

**FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.**

**Ingestion:** Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

**Eye Contact:** Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Skin Contact:** Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

**Inhalation:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels

below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Red liquid
Odor:	Odorless
Melting Point:	Not Applicable
Boiling Point:	Not Available
Specific Gravity/Density:	1.28 g/ml
pH:	6.21 @77°F (25°C)

### Solubility in H<sub>2</sub>O

Glyphosate, N-(phosphonomethyl) glycine: 0.91 g/100ml @ 68°F (20°C)

### Vapor Pressure

Glyphosate, N-(phosphonomethyl) glycine: < 1.8 x 10<sup>(-7)</sup> mmHg @ 77°F (25°C)

## 10. STABILITY AND REACTIVITY

Stability:	Stable under normal use and storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Concentrate should not be stored in galvanized steel, carbon steel, aluminum or unlined steel containers. Spray solutions should not be mixed, stored or applied in containers other than plastic, plastic-lined steel, stainless steel or fiberglass.
Materials to Avoid:	See "Conditions to Avoid", Section 10
Hazardous Decomposition Products:	Can decompose at high temperatures forming toxic gases. Flammable hydrogen gas may be formed on contact with incompatible metals. See "Conditions to Avoid", Section 10.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:	<u>Not Available</u>	
	Oral (LD50 Rat) :	Not Available
Dermal:	<u>Not Available</u>	
	Dermal (LD50 Rabbit) :	Not Available
Inhalation:	<u>Not Available</u>	
	Inhalation (LC50 Rat) :	Not Available
Eye Contact:	Not Available	
Skin Contact:	Not Available	
Skin Sensitization:	Not Available	

### Reproductive/Developmental Effects

Glyphosate, N-(phosphonomethyl) glycine: No mutagenic or developmental effects seen in animal studies.

### Chronic/Subchronic Toxicity Studies

Glyphosate, N-(phosphonomethyl) : Rat subchronic 90-day study - NOEL of 5,000 ppm (410 - 440 mg/kg). Body weight reduction, clinical chemistry changes.

glycine:

Carcinogenicity

Glyphosate, N-(phosphonomethyl) glycine: Not genotoxic in Ames, mouse lymphoma, human lymphocyte and mouse micronucleus tests.

Other Toxicity Information

None

Toxicity of Other Components

Surfactant

Exposure can result in eye and skin irritation.

Surfactant

Moderately irritating to eyes.

Target Organs

Active Ingredients

Glyphosate, N-(phosphonomethyl) glycine: Skin, eye

Inert Ingredients

Surfactant: Eye, skin

Surfactant: Eye

**12. ECOLOGICAL INFORMATION**

Summary of Effects

Glyphosate, N-(phosphonomethyl) glycine:  
Unlikely to be hazardous to aquatic life.

Eco-Acute Toxicity

Glyphosate, N-(phosphonomethyl) glycine: Bluegill Sunfish 96-hour LC50 47 mg/l  
Daphnia magna 48-hour EC50 > 1000 mg/l  
Rainbow trout 96-hour EC50 130 mg/l  
Green Algae EbC50 17 mg/l  
Green Algae ErC50 21 mg/l

Eco-Chronic Toxicity

Glyphosate, N-(phosphonomethyl) glycine: Not Available

Environmental Fate

Glyphosate, N-(phosphonomethyl) glycine:  
Environmental fate studies indicate that glyphosate will degrade rapidly in soil due to microbial degradation and that the parent compound and its major degradate aminomethylphosphonic acid will not leach.

**13. DISPOSAL CONSIDERATIONS**

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

**14. TRANSPORT INFORMATION**

DOT Classification

Not regulated by DOT.

B/L Freight Classification

Herbicides, NOIBN

Comments

None.

**15. REGULATORY INFORMATION**

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: Not Applicable

California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

TSCA Status

Exempt from TSCA, subject to FIFRA

**16. OTHER INFORMATION**

NFPA Hazard Ratings

Health: 1  
Flammability: 1  
Instability: 0

HMIS Hazard Ratings

Health: 1  
Flammability: 1  
Reactivity: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 03/14/2003

Revision Date: 03/17/2003

Replaces:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

RSVP# : SCP-955-00389B

End of MSDS