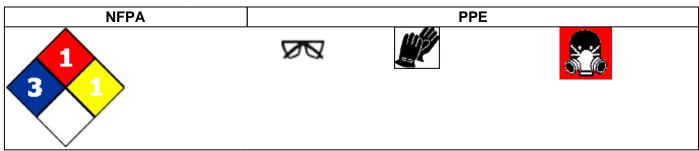


MATERIAL SAFETY DATA SHEET

United Phosphorus, Inc.



Issued Date 12-Dec-2007 Revision date 02-Apr-2014 **Revision Number: 2**

1. PRODUCT AND COMPANY IDENTIFICATION

UPI 630 Freedom Business Center

Suite 402

UPI

King of Prussia, PA 19406

Emergency telephone number

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887 Medical: Rocky Mountain Poison Control Center

(866) 673-6671 (24hrs)

Company Information Contact Information Phone number Available Hrs

Customer Service 1-800-438-6071 8:00 am to 5:00 pm EST R&D Technical Service 610-878-6100 8:00 am - 5:00 pm (EST)

Product name Blazer Herbicide

EPA Reg# 70506-60 / PCP # 23315

Recommended use Herbicide **Product code** 12U-104CAN

2. Hazards Identification

EMERGENCY OVERVIEW

Causes irreversible eye damage

Contains Butyl Cellosolve. Inahalation of Butyl Cellosolve causes lung, liver, kidney and blood changes in laboratory animals.

irritant

May cause drowsiness and dizziness Very toxic in contact with skin Very toxic if swallowed corrosive

DANGER

appearance light, to, dark amber. Physical state liquid. Odor Unusual. Mild (bad translation).

Potential health effects

Acute effects Existing medical conditions aggravated by exposure to butyl cellosolve: Individuals with

existing hemolytic disorders.

EYES Causes irreversible eye damage.

MAY CAUSE SKIN IRRITATION. Very toxic in contact with skin. skin

HARMFUL IF SWALLOWED. Very toxic if swallowed. Ingestion

3. Composition/information on Ingredients

Ingredients Name

Component	CAS-No	Weight %	OSHA PEL
Butyl cellosolve 111-76-2 (8.5)	111-76-2	8.5	TWA: 50 ppm TWA: 240 mg/m³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m³ (vacated) S* S*
Acifluorfen, sodium salt 62476-59-9 (20.1)	62476-59-9	20.1	N/A

4. First aid measures

Immediately flush with plenty of water. After initial flushing, remove any contact Eye contact

lenses and continue flushing for at least 15 minutes

Keep eye wide open while rinsing Remove from exposure, lie down Call a physician immediately

Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes

Skin contact Wash off immediately with soap and plenty of water removing all contaminated

clothes and shoes

Call a physician immediately

Wash off immediately with plenty of water for at least 15 minutes

Remove and wash contaminated clothing before re-use

Inhalation Move to fresh air

Get medical attention immediately

Call a physician or poison control center immediately Ingestion

Never give anything by mouth to an unconscious person

Do NOT induce vomiting Call a physician immediately

Do not induce vomiting without medical advice

Notes to physician No information available

5. Fire-fighting measures

Flammable Explosive Properties

flash point

99

°C

210

Autoignition temperature Not Available

Flammability Limits in Air

Extnguishing Media Water Carbon dioxide (CO2) Dry chemical

Fire/Explosion Hazard May produce toxic materials during fire conditions

Hazardous combustion products Hydrogen chloride, Hydrogen fluoride, Oxides of nitrogen.

NFPA HEALTH 3 flammability 1 Instability 1

6. Accidental release measures

Personal Precautions Use personal protective equipment. Keep people away from and upwind of

spill/leak.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering

drains.

Methods for Clean-UpSoak up with inert absorbent material. Dam up. Pick up and transfer to properly

labelled containers. Prevent product from entering drains.

7. Handling and Storage

Handling Wear personal protective equipment. Do not breathe vapours or spray mist.

Storage Keep in properly labelled containers. Keep containers tightly closed in a cool,

well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Butyl cellosolve	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³
		(vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³
		(vacated) S*
		S*

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eve/Face Protection Tightly fitting safety goggles.

Skin protection Long sleeved clothing. Chemical resistant apron. Impervious butyl rubber gloves. Break

through time. .?.

Respiratory protection Wear a positive-pressure supplied-air respirator.

General hygiene considerations

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing.

9. Physical and Chemical Properties

light to dark amber Unusual Mild (bad translation) appearance Odor рΗ No Data Available Physical state liauid **Boiling Point/Range** 103 °C / 217 °F Melting Point/Range Not Available 1.18 g/ml solubility Soluble Specific gravity Not Available evaporation rate Not Available vapor pressure **VOC Content** vapor density Not Available Not Available viscosity Not Available molecular weight No Data Available **Bulk density** 9.82 lb/gal **Percent Solids** Not Available **Percent Volatiles** Not Available

10. Stability and Reactivity

stability Stable under recommended storage conditions

Conditions to avoid Freezing temperatures

incompatible materials OXIDIZERS

Hazardous decomposition products Carbon oxides

Possibility of Hazardous Polymerization Hazardous polymerisation does not occur

11. Toxicological Information

Acute toxicity

Component Information Sodium acifluorfen:

Oral LD50 (rat) = 1370 mg/kg (female) 2025 mg/kg (male)

Dermal LD50 (rabbit) = > 2,000 mg/kg Inhalation LC50 (rat) = 6.9 mg/L

Skin irritation (rabbit) = Moderately irritating Eye irritation (rabbit) - Severely irritating

Chronic toxicity

Carcinogenicity The information below indicates whether any agency has listed any ingredient as a

carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Butyl cellosolve	A3	Group 3		

12. Ecological Information

ecotoxicity

Sodium acifluorfen-

Aquatic:

Rainbow trout, 96 hr LC50 = 54 mg ai/L

Bluegill sunfish, 96 hr LC 50 = 31 mg ai/L (static)

Daphnia magna, 48 hr EC50 = 28 mg ai/L

Channel catfish, 96 hr LC50 = 80 mg/L

Grass shrimp, 96 hr LC50 = 189 mg/L

Fiddler Crab 96 hr LC50 = >1,000 mg/L

Freshwater clam, 96 hr LC50 = 64 mg ai/L

Eastern oyster, 48 hr C50 = 31.3 mg ai/L

Avian:

Bobwhite quail, LC50 >10,000 mg/kg Mallard duck, LC50 >10,000 mg/kg.

13. Disposal Considerations

Waste Disposal Method

Should not be released into the environment. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging

Clean container with water. Empty containers should be taken for local recycling,

recovery or waste disposal.

14. Transport Information

DOT NOT REGULATED

ICAO NOT REGULATED

IATA NOT REGULATED

IMDG/IMO NOT REGULATED

TDG NOT REGULATED

15. Regulatory Information

International Inventories

Chemical name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	China	KECL	AICS
Butyl cellosolve	Present	X		X	Present	Х	Present	X
Acifluorfen, sodium salt	Present		Х	Х		Х		Х

USA

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Chemical na	ne CAS-No	Weight %	SARA 313 - Threshold Values
Acifluorfen, sodiu	m salt 62476-59-	9 20.1	1.0

SARA 311/312 Hazardous Categorization

Chronic health hazard yes
Acute health hazard yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard yes

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Butyl cellosolve	111-76-2	8.5		Group I		

CERCLA

SARA Product RQ 0

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Butyl cellosolve			Χ	

12U-104CAN Blazer Herbicide

111-76-2 (8.5)			
Acifluorfen, sodium salt		Х	
62476-59-9 (20.1)			

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	CAS-No	CATEGORY	California Prop. 65	Non-additive, corrosive chemical type
Acifluorfen, sodium salt	62476-59-9	Carcinogen	Carcinogen	

State Right-to-Know

Ctate right to renow	1	1			
Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Butyl cellosolve	X	X	X	X	
Acifluorfen, sodium salt		Х			

International regulations

Mexico - Grade

Slight risk, Grade 1

Component	CATEGORY	Carcinogen Status	Exposure limits
Butyl cellosolve 111-76-2(8.5)			Mexico: TWA 26 ppm Mexico: TWA 120 mg/m³ Mexico: STEL 75 ppm Mexico: STEL 360 mg/m³
Acifluorfen, sodium salt 62476-59-9 (20.1)	Carcinogen		

CANADA

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

WHMIS Hazard Class

Non-controlled

Chemical name	NPRI
Butyl cellosolve	X

Legend

NPRI - National Pollutant Release Inventory

The preparation is classified as dangerous in accordance with Directive 1999/45/EC

16. Other Information

Revision date

02-Apr-2014

Revision Summary

Update section 14

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End of MSDS