SAFETY DATA SHEET

Dismiss® CA Herbicide

SDS # : 1466-5-A

Revision date: 2016-05-26

Format: NA Version 1.01



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Dismiss® CA Herbicide

Other means of identification

Product Code(s) 1466-5-A

Synonyms SULFENTRAZONE (FMC 97285):

2',4'-dichloro-5'-(4-difluoromethyl-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl)

methanesulfonanilide (IUPAC name);

N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-

1,2,4-triazol-1-yl]phenyl] methanesulfonamide (CAS name)

Active Ingredient(s) Sulfentrazone,

Chemical Family Triazolinones

Alternate Commercial Name Authority™ 4 F; Boral™ 480 SC; Spartan™ 4F

Recommended use of the chemical and restrictions on use

Recommended Use: Herbicide

Restrictions on Use: Use as recommended by the label

Manufacturer Address

FMC Corporation 2929 Walnut Street Philadelphia, PA 19104

(215) 299-6000 (General Information)

msdsinfo@fmc.com (E-Mail General Information)

Emergency telephone number

For leak, fire, spill or accident emergencies, call:

1 800 / 424 9300 (CHEMTREC - U.S.A.)

1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

Medical Emergencies:

1 800 / 331-3148 (PROSAR - U.S.A. & Canada)

1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Specific target organ toxicity (repeated exposure)

Category 2

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GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Warning

Hazard Statements

H373 - May cause damage to organs through prolonged or repeated exposure



Precautionary Statements - Prevention

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

P314 - Get medical advice/ attention if you feel unwell

Precautionary Statements - Disposal

P501 - Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Very toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family

Triazolinones.

Chemical name	CAS-No	Weight %
Sulfentrazone	122836-35-5	40
Propylene glycol	57-55-6	5-10
Toluene	108-88-3	1-5

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact

lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control

center or doctor for further treatment advice.

Skin Contact Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call a poison control center or doctor for further treatment advice.

Inhalation Move to fresh air. If person is not breathing, contact emergency medical services, then give

artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or

doctor for further treatment advice.

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If swallowed, do not induce vomiting - seek medical advice Call a poison control center or Ingestion

doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor.

Do not induce vomiting or give anything by mouth to an unconscious person.

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Most important symptoms and effects, both acute and delayed

Central nervous system effects.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide (CO₂). Foam. Dry powder. Water spray.

Specific Hazards Arising from the

Chemical **Explosion data**

Sensitivity to Mechanical Impact Sensitivity to Static Discharge

Not sensitive.

Not sensitive.

Protective equipment and precautions for firefighters Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing,

gloves and eye/face protection. For personal protection see section 8.

Other For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1

"Product and Company Identification" above.

Environmental Precautions Keep people and animals away from and upwind of spill/leak. Keep material out of lakes,

streams, ponds, and sewer drains.

Methods for Containment Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and

transfer to containers for later disposal.

Clean and neutralize spill area, tools and equipment by washing with bleach water and Methods for cleaning up

soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled

prior to recycling or disposal. Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Handling Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces Storage

and sources of ignition. Keep out of reach of children and animals. Store in original

container.

Incompatible products None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Toluene	TWA: 20 ppm	TWA: 200 ppm	IDLH: 500 ppm	Mexico: TWA 50 ppm
(108-88-3)		Ceiling: 300 ppm	TWA: 100 ppm	Mexico: TWA 188 mg/m ³
			TWA: 375 mg/m ³	

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			STEL: 150 ppm STEL: 560 mg/m ³	
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Propylene glycol (57-55-6)	-	-	TWA: 10 mg/m³ - aerosol only TWA: 50 ppm aerosol and vapor TWA: 155 mg/m³ aerosol and vapor	
 	TIAVA CO	T)A/A 50	T)A/A 00	T)A/A 50
Toluene (108-88-3)	TWA: 20 ppm	TWA: 50 ppm TWA: 188 mg/m³ Skin	TWA: 20 ppm	TWA: 50 ppm TWA: 188 mg/m³ Skin

Appropriate engineering controls

Engineering measures Apply technical measures to comply with the occupational exposure limits. When working in

confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for

breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection Protective gloves

Respiratory Protection For dust, splash, mist or spray exposures wear a filtering mask.

Hygiene measures Clean water should be available for washing in case of eye or skin contamination. Wash

skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing

separately from regular household laundry.

General information If the product is used in mixtures, it is recommended that you contact the appropriate

protective equipment suppliers. These recommendations apply to the product as supplied

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Off-white Liquid

Physical StateLiquidColorOff-whiteOdorLow Alcohol

Odor threshold No information available pH 5.3-6.0 @ 20 °C

Melting point/freezing point 123 °C

Boiling Point/Range No information available

Flash point > 94 °C / > 201 °F Tag Closed Cup

Evaporation Rate
No information available
Plammability (solid, gas)
No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
1 x 10-9 mm Hg at 25°C
No information available

Density 10.07 lb/gal

Specific gravity 1.206 1.206 20 °C (water = 1)

Water solubility Dispersible in water

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Solubility in other solvents No information available **Partition coefficient** No information available **Autoignition temperature** No information available **Decomposition temperature** No information available Viscosity, kinematic No information available Viscosity, dynamic No information available No information available **Explosive properties Oxidizing properties** No data available Molecular weight No information available **Bulk density** No information available

10. STABILITY AND REACTIVITY

Reactivity None under normal use conditions.

Chemical Stability Stable.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Excessive heat **Incompatible materials** None known.

Hazardous Decomposition Products Carbon oxides (COx), Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride, Hydrogen

fluoride.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral 2084 mg/kg (rat) **LD50 Dermal** > 2000 mg/kg (rabbit)

LC50 Inhalation > 2.72 mg/L 4 hr (rat) - Maximum attainable concentration (zero mortality)

Serious eye damage/eye irritation Non-irritating.
Skin corrosion/irritation Minimally irritating.

Sensitization Did not cause sensitization on laboratory animals.

Information on toxicological effects

Symptoms Signs of toxicity in laboratory animals given sulfentrazone included clonic convulsions,

ataxia, hypersensitivity to touch, chromorhinorrhea, abdominogenital staining, decreased

locomotion, lacrimation, nasal discharge, and squinting eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity Sulfentrazone: Prolonged exposure cause decreased hemoglobin content and hematocrit,

and increased spleen weight and splenic extramedullary hematopoiesis at high doses in

animal studies

Mutagenicity Sulfentrazone: Not genotoxic in animal studies

Carcinogenicity Sulfentrazone: No evidence of carcinogenicity from animal studies

Neurological effectsSulfentrazone: Clinical signs of neurotoxicity in laboratory animals was observed at high

dose levels.

Reproductive toxicity Sulfentrazone: No toxicity to reproduction in animal studies.

Developmental toxicitySulfentrazone: Fetal weight decreased; delayed skeletal ossification observed at maternally

non-toxic doses are reversible effects and a dose-response is established; malformations observed in fetuses at maternally toxic doses and consistent with the mode of action for protoporphyrongen oxidase inhibitors. Developmental toxicity testing and results were

generated for sulfentrazone with toluene present as an impurity.

STOT - single exposure Not classified.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organ effects Sulfentrazone: Hematopoietic system.

Neurological effects Sulfentrazone: Clinical signs of neurotoxicity in laboratory animals was observed at high

dose levels.

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Aspiration hazard No information available.

Chemical name	ACGIH	IARC	NTP	OSHA	
Toluene		Group 3			
108-88-3		•			

12. ECOLOGICAL INFORMATION

Ecotoxicity

Sulfentrazone (122836-35-5)				
Active Ingredient(s)	Duration	Species	Value	Units
Sulfentrazone	72 h EC50	Algae	32.8	mg/L
	48 h EC50	Crustacea	60.4	mg/L
	96 h LC50	Fish	94	mg/L
	21 d NOEC	Fish	5.9	mg/L
	21 d NOEC	Crustacea	0.51	mg/L

Persistence and degradability Sulfentrazone: Persistent, Does not readily hydrolyze, Not readily biodegradable.

Bioaccumulation Sulfentrazone: The substance does not have a potential for bioconcentration.

Mobility Sulfentrazone: Mobile, Has potential to reach ground water.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these

wastes cannot be disposed of by use according to label instructions, contact appropriate

disposal authorities for guidance.

Contaminated PackagingContainers must be disposed of in accordance with local, state and federal regulations.

Refer to the product label for container disposal instructions.

14. TRANSPORT INFORMATION

DOTThis material is not a hazardous material as defined by U.S. Department of Transportation

at 49 CFR Parts 100 through 185.

TDG Classification below is only applicable when shipped by vessel and is not applicable when

shipped by road or rail only.

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard class 9
Packing Group III

Marine Pollutant Sulfentrazone.

Description UN3082, Sustancia líquida peligrosa para el medio ambiente, n.e.p. (sulfentrazona), 9,

PGIII, Contaminante marino

ICAO/IATA

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.

Hazard class
Packing Group

Description UN3082, Sustancia líquida peligrosa para el medio ambiente, n.e.p. (sulfentrazona), 9,

PGIII, Contaminante marino

IMDG/IMO

UN/ID no UN3082 Hazard class 9

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Packing GroupIIIEmS No.F-A, S-FMarine PollutantSulfentrazone

Description UN3082, Sustancia líquida peligrosa para el medio ambiente, n.e.p. (sulfentrazona), 9,

PGIII, Contaminante marino

15. REGULATORY INFORMATION

U.S. 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 Title 40 of the Code of Federal Regulations, Part 372:

Chemical name		CAS-No	Weight %	SARA 313 - Threshold Values %
	Toluene - 108-88-3	108-88-3	1-5	1.0

SARA 311/312 Hazard Categories

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

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	emical name CWA - Reportable CWA - Toxic Pollutants Quantities		CWA - Priority Pollutants	CWA - Hazardous Substances	
Toluene 108-88-3	1000 lb	Х	Х	X	
Sodium Hydroxide 1310-73-2	1000 lb			X	

CERCLA

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Toluene	1000 lb	
108-88-3	454 kg	
Sodium Hydroxide	1000 lb	
1310-73-2	454 kg	

FIFRA Information

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. Following is the hazard information as required on the pesticide label:

CAUTION

Causes moderate eye irritation. Harmful if inhaled, swallowed, or absorbed through skin. This pesticide is toxic to marine/estuarine invertebrates

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65

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Toluene - 108-88-3	Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol 57-55-6	X		X
Toluene 108-88-3	X	X	X

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Propylene glycol 57-55-6	X	X	X	Χ	X	X	Х	X
Toluene 108-88-3	Х	Х	Х	Х	Х	Х	Х	Х

Mexico - Grade

Slight risk, Grade 1

Chemical name	Carcinogen Status	Mexico	
Toluene		Mexico: TWA 50 ppm	
		Mexico: TWA 188 mg/m ³	

Chemical name	Mexico - Pollutant Release and Transfer Register - Reporting Emissions for Fabrication, Process or Use -Threshold Quantities	Pollutant Release and Transfer Register - Reporting Emissions - Threshold Quantities
Toluene	1000 5000 kg/yr	1000 kg/yr

WHMIS Statement

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

D2A - Very toxic materials



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NFPA	Health Hazards 1	Flammability 1	Instability 0	Special Hazards -	
HMIS	Health Hazards 1*	Flammability 1	Physical hazard 0	Personal Protection X	

16. OTHER INFORMATION

Revision date: 2016-05-26

Reason for revision: (M)SDS sections updated

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End of Safety Data Sheet