# SAFETY DATA SHEET

SZ-75 Herbicide

SDS #: 6109-4-A Revision date: 2019-11-22

Format: NA Version 1



# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier** 

SZ-75 Herbicide **Product Name** 

Other means of identification

Product Code(s) 6109-4-A

**Legacy Product Code** FO000435

SULFENTRAZONE (FMC 97285): **Synonyms** 

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

Triazolinones **Chemical Family** 

PCP# 33832

Recommended use of the chemical and restrictions on use

**Recommended Use:** Herbicide

**Restrictions on Use:** Use as recommended by the label.

FMC of Canada Limited Supplier Address

6755 Mississauga Road, Suite 204 Mississauga, ON L5N 7Y2

Canada

Web: https://ag.fmc.com/ca/en

Phone (AgHotline): 1-833-FMC-PPAC (1-833-362-7722)

Email: SDS-Info@fmc.com

Emergency telephone number

Medical Emergencies:

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

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

For leak, fire, spill or accident emergencies, call: 1 800 / 424-9300 (CHEMTREC - U.S.A.) 1 703 / 741-5970 (CHEMTREC - International) 1 703 / 527-3887 (CHEMTREC - Alternate)

# 2. HAZARDS IDENTIFICATION

Classification

**OSHA Regulatory Status** 

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This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Specific target organ toxicity (repeated exposure)	Category 2

### GHS Label elements, including precautionary statements

## **EMERGENCY OVERVIEW**

#### Danger

## **Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H350 - May cause cancer

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



## **Precautionary Statements - Prevention**

P271 - Use only outdoors or in a well-ventilated area

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

# **Precautionary Statements - Response**

P314 - Get medical advice/ attention if you feel unwell

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor 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. May be harmful in contact with skin.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

# Chemical Family Triazolinones.

Chemical name	CAS-No	Weight %
Sulfentrazone	122836-35-5	75
Toluene	108-88-3	1-5
Sodium diisopropylnaphthalenesulfonate	1322-93-6	1-5

Synonyms are provided in Section 1.

# 4. FIRST AID MEASURES

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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, call 911 or an ambulance, then give artificial

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

further treatment advice.

Ingestion Call a poison control center or 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 give anything by mouth to an unconscious person.

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 Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

**Small Fire** Dry chemical, Carbon dioxide (CO<sub>2</sub>).

Water spray, Foam. Large Fire

Unsuitable extinguishing media Avoid heavy hose streams.

Specific Hazards Arising from the

Chemical

**Explosion data** 

**Sensitivity to Mechanical Impact** 

Sensitivity to Static Discharge

Protective equipment and precautions for firefighters Powdered material may form explosive dust-air mixtures

No information available. No information available.

Isolate fire area. Evaluate upwind. As in any fire, wear self-contained breathing apparatus

and full protective gear.

# 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. Keep out of waterways.

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area,

tools and equipment by washing with water and 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 Handle in accordance with good industrial hygiene and safety practice. Do not contaminate

other pesticides, fertilizers, water, food, or feed by storage or disposal.

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Storage Keep away from open flames, hot surfaces and sources of ignition. Keep in a dry, cool and

well-ventilated place. Keep out of reach of children and animals. Keep/store only in original

container.

Packaging material Must only be kept in original packaging.

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 20 ppm
(108-88-3)		Ceiling: 300 ppm	TWA: 100 ppm	
			TWA: 375 mg/m <sup>3</sup>	
			STEL: 150 ppm	
			STEL: 560 mg/m <sup>3</sup>	
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Toluene	TWA: 20 ppm	TWA: 50 ppm	TWA: 20 ppm	TWA: 50 ppm
(108-88-3)		TWA: 188 mg/m <sup>3</sup>		TWA: 188 mg/m <sup>3</sup>
		Skin		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 Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the

outside of gloves with soap and water before reuse. Check regularly for leaks.

**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. Remove

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

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# Information on basic physical and chemical properties

Appearance Granules
Physical State Dry powder
Color Brown
Odor Slight Musty

Odor threshold No information available

pH 6.5 - 7.5Melting point/freezing point Not applicable

Boiling Point/Range No information available

Flash point Not applicable

**Evaporation Rate** No information available

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Flammability (solid, gas)

Flammability Limit in Air

No information available

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density
Relative density
Specific gravity
No information available

Water solubility Soluble in water

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 information available Molecular weight No information available **Bulk density** 38 lb/cu ft @ 25°C

## 10. STABILITY AND REACTIVITY

**Reactivity** None under normal use conditions

Chemical Stability Stable under recommended storage conditions.

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** 2416 mg/kg (female rat) (Based on a similar product) **LD50 Dermal** > 5000 mg/kg (rat) (Based on a similar product)

LC50 Inhalation (dust) Sulfentrazone: > 4.13 mg/L (rat) 4 hr - Maximum attainable concentration (zero

mortality) (Based on a similar product)

Serious eye damage/eye irritation

Skin corrosion/irritation

Mildly irritating (rabbit). (Based on a similar product). Slightly irritating (rabbit). (Based on a similar product).

**Sensitization** Non-sensitizing (Based on a similar product)

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation (vapor)
Toluene	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
(108-88-3)			
Sodium	= 1350 mg/kg (Rat)	= 4200 mg/kg (Rabbit)	
diisopropylnaphthalenesulfonate			
(1322-93-6)			

### 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.

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

Chronic toxicity Chronic exposure to silica dust may increase the risk of developing pneumoconiosis or

silicosis, chronic diseases affecting the lungs, characterized by labored breathing, cough, reduction of work capacity, reduction of lung capacity, heart enlargement and failure

**Mutagenicity** Sulfentrazone: Not genotoxic in laboratory studies.

**Carcinogenicity** Sulfentrazone. No evidence of carcinogenicity from animal studies.

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

dose levels.

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

**Developmental toxicity**Sulfentrazone: 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 STOT - repeated exposure

Target organ effects

Not classified.

May cause damage to organs through prolonged or repeated exposure.

Sulfentrazone. Hematopoietic system.

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

dose levels.

**Aspiration hazard** No information available.

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

#### Legend:

IARC (International Agency for Research on Cancer) Group 3 - Not classifiable as to its carcinogenicity to humans

# 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

Sulfentrazone (122836-35-5)				
Active Ingredient(s)	Duration	Species	Value	Units
	96 h LC50	Onchorhyncus mykiss	> 120	mg/L
	99 d NOAEC	Onchorhyncus mykiss	2.95	mg/L
	48 h EC50	Daphnia magna	60.4	mg/L
	21 d NOAEC	Daphnia magna	0.2	mg/L
	120 h EC50	Pseudokirchneriella subcapitata	0.031	mg/L
	120 h EC50	Navivula pelliculosa	0.042	mg/L
	14-day EC50	Lemna gibba (duckweed)	0.0288	mg/L
	14-d NOAEL	Lemna gibba (duckweed)	0.019	mg/L

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other
			aquatic invertebrates
Toluene	72 h EC50: = 12.5 mg/L	96 h LC50: 11.0 - 15.0 mg/L	48 h EC50: 5.46 - 9.83 mg/L
108-88-3	(Pseudokirchneriella subcapitata)	(Lepomis macrochirus) static 96 h	(Daphnia magna) Static 48 h EC50:
	static 96 h EC50: > 433 mg/L	LC50: 14.1 - 17.16 mg/L	= 11.5 mg/L (Daphnia magna)

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	(Pseudokirchneriella subcapitata)	(Oncorhynchus mykiss) static 96 h LC50: 15.22 - 19.05 mg/L (Pimephales promelas) flow-through 96 h LC50: 5.89 - 7.81 mg/L (Oncorhynchus mykiss) flow-through 96 h LC50: 50.87 - 70.34 mg/L (Poecilia reticulata) static 96 h LC50: = 12.6 mg/L (Pimephales promelas) static 96 h LC50: = 28.2 mg/L (Poecilia reticulata) semi-static 96 h LC50: = 5.8 mg/L (Oncorhynchus mykiss) semi-static 96 h LC50: = 54 mg/L (Oryzias latipes) static	
Sulfentrazone 122836-35-5	32.6	94 mg/L&5.9	60.4 mg/L&0.51
Sodium sulfate 7757-82-6		96 h LC50: 13500 - 14500 mg/L (Pimephales promelas) 96 h LC50: 3040 - 4380 mg/L (Lepomis macrochirus) static 96 h LC50: = 13500 mg/L (Lepomis macrochirus) 96 h LC50: > 6800 mg/L (Pimephales promelas) static	48 h EC50: = 2564 mg/L (Daphnia magna) 96 h EC50: = 630 mg/L (Daphnia magna)
Sodium lignosulfonate 8061-51-6		48 h LC50: = 7300 mg/L (Oncorhynchus mykiss)	

Persistence and degradability Sulfentrazone. Persistent in soil. 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. Proper personal protective equipment, as described in

Sections 7 and 8, must be worn while handling materials for waste disposal.

Contaminated containers and packages

Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions. Do not reuse or refill this

container.

# 14. TRANSPORT INFORMATION

**DOT**This 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 UN307

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sulfentrazone)

Hazard class
Packing Group

Marine Pollutant Sulfentrazone.

**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (sulfentrazone), 9,

III,MarinePollutant

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ICAO/IATA

UN/ID no UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sulfentrazone)

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Hazard class 9
Packing Group III

**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (sulfentrazone), 9,

III,MarinePollutant

IMDG/IMO

UN/ID no UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sulfentrazone)

Hazard class 9
Packing Group III

Environmental Hazards Sulfentrazone

**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (sulfentrazone), 9,

III, Marine Pollutant

# 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	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3	1000 lb	Х	Х	Х

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Toluene	1000 lb	
108-88-3	454 ka	

### **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

Harmful is swallowed. Causes moderate eye irritation.

This pesticide is toxic to marine/estuarine invertebrates.

# **US State Regulations**

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### **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65
Toluene - 108-88-3	Developmental

### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Toluene	X	X	X
108-88-3			

#### **International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Toluene 108-88-3	Х	Х	Х	Х	Х	Х	Х	Х
Sodium diisopropylnaphthalenes ulfonate 1322-93-6	Х	Х	X	Х	Х	X	Х	Х

#### **CANADA**

This Safety Data Sheet is for a pesticide product registered by the Pest Management Regulatory Agency (PMRA), and is therefore also subject to certain requirements under Canadian pesticide laws, including the Pest Control Products Act (PCPA). These requirements differ from the classification criteria and hazard information required by the Hazardous Product Regulations (HPR) and WHMIS 2015 for safety data sheets, and for workplace labels of non-pesticide chemicals. The following information is determined by PMRA.

The approved pest control product label (the label), under the Pest Control Products Act, needs to be followed at all times and in cases where there are any discrepancies between the approved label and an SDS for that product it is the label information that prevails.

46 OTHER INCORMATION	
16. OTHER INFORMATION	

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

<sup>\*</sup>Indicates a chronic health hazard.

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

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Prepared By:

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**End of Safety Data Sheet**