SAFETY DATA SHEET

Spitfire 50SC Herbicide

SDS #: FO002216-A **Revision date**: 2017-03-02

Format: NA Version 1



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Spitfire 50SC Herbicide

Other means of identification

Product Code(s) FO002216-A

Synonyms FLORASULAM:

N-(2,6-Difluorophenyl)-8-fluoro-5-methoxy[1,2,4]triazolo[1,5-c]-pyrimidine-2-sulfonamide (CAS name); 2',6',8-Trifluoro-5 methoxy[1,2,4]triazolo[1,5-c]pyrimidine-2-sulfonanilide

(IUPAC name)

Active Ingredient(s) Florasulam

Chemical Family Triazolopyrimidine sulfonanilide

PCP # 31252

Recommended use of the chemical and restrictions on use

Recommended Use: Herbicide

Restrictions on Use: Use as recommended by the label

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

GHS Label elements, including precautionary statements

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EMERGENCY OVERVIEW

Warning

Hazard Statements

H400 - Very toxic to aquatic life



Precautionary Statements - Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

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

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P312 - Call a POISON CENTER or doctor if you feel unwell

P363 - Wash contaminated clothing before reuse

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

P311 - Call a POISON CENTER or doctor

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P391 - Collect spillage

Precautionary Statements - Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

Precautionary Statements - Disposal

Dispose of contents/container according to label directions

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family

Triazolopyrimidine sulfonanilide.

Chemical name	CAS-No	Weight %
Florasulam	145701-23-1	4.8
Propylene glycol	57-55-6	5-10

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

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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 (within the U.S. and Canada) 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 physician or poison control center immediately. 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

No known/observed signs or symptoms of short-term (acute) exposure. Prolonged or

repeated (chronic) exposure may cause adverse kidney effects.

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

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use water spray, fog, Carbon dioxide (CO 2), foam or dry chemical. Avoid heavy hose

streams.

Specific Hazards Arising from the

Chemical

Hazardous Combustion Products

None known

The essential breakdown products are volatile, toxic, irritant and inflammable compounds

such as: Nitrogen oxides (NOx), Sulfur dioxide, Carbon monoxide, Carbon dioxide (CO₂), Hydrogen fluoride, various chlorinated and fluorinated organic compounds.

Explosion data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge Not expected to be sensitive to mechanical impact. Not expected to be sensitive to static discharge.

Protective equipment and precautions for firefighters

Use water spray to cool fire exposed surfaces and protect personnel. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Dike to prevent runoff. As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. For personal protection see section 8. Stop leak if you

can do it without risk. Eliminate all ignition sources (no smoking, flares, sparks or flames in

immediate area). Avoid breathing vapors or mists. Avoid dust formation.

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

"Product and Company Identification" above.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods for Containment Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth,

diatomaceous earth, vermiculite) and place in container for disposal according to local /

national regulations (see Section 13).

Methods for cleaning up If appropriate, surface water drains should be covered. Minor spills on the floor or other

impervious surface should be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with strong industrial detergent and much water. Absorb wash liquid onto a suitable absorbent such as hydrated lime, universal binder, attapulgite, bentonite or other absorbent clays and transfer

contaminated absorbent to suitable containers. The used containers should be properly

closed and labelled.

7. HANDLING AND STORAGE

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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.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from freezing.

Do not contaminate other materials, or allow this material to be contaminated, by improper

storage or handling. Keep out of reach of children and animals.

Incompatible products None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Propylene glycol	-	-	TWA: 10 mg/m ³	-
(57-55-6)			aerosol only	
			TWA: 50 ppm aerosol and vapor	
			TWA: 155 mg/m³ aerosol and vapor	

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. Wear impervious protective clothing,

including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Minimize skin contamination by following good industrial hygiene practices.

Hand Protection Wear chemical protective gloves made of materials such as nitrile or neoprene

Respiratory Protection The product does not automatically present an airborne exposure concern during normal

handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment

with a universal filter type including particle filter.

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 Suspension
Physical State Liquid
Color Opaque, White
Odor Gasoline-like

Odor threshold No information available

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pН 4.04 @ 25°C (undiluted): 4.4 @ 25°C (1% dispersion in water)

Melting point/freezing point Not applicable

Boiling Point/Range No information available

Flash point Not flammable

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

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available **Density** 1.040 g/mL @ 20°C Specific gravity No information available Water solubility No information available Solubility in other solvents No information available Partition coefficient No information available Autoignition temperature No information available **Decomposition temperature** No information available Viscosity, kinematic 1048 mPa @20°C

897 mPa @40°C

No information available Viscosity, dynamic

Explosive properties Not explosive

Oxidizing properties No information available Molecular weight No information available **Bulk density** No information available

10. STABILITY AND REACTIVITY

Reactivity Stable under recommended storage conditions

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization does not occur. **Hazardous polymerization**

Heating can release hazardous gases Conditions to avoid

Incompatible materials None known.

Hazardous Decomposition Products See Section 5 for more information.

11. TOXICOLOGICAL INFORMATION

Product Information

> 2000 mg/kg (rat) LD50 Oral LD50 Dermal > 2000 mg/kg (rat) > 5.07 mg/L (rat) (4-hr) LC50 Inhalation

Serious eye damage/eye irritation Non-irritating. Skin corrosion/irritation Non-irritating. Non-sensitizer Sensitization

Information on toxicological effects

No known/observed signs or symptoms of short-term (acute) exposure. Prolonged or **Symptoms**

repeated (chronic) exposure may cause adverse kidney effects.

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

Mutagenicity Did not show mutagenic effects in animal experiments Did not show carcinogenic effects in animal experiments Carcinogenicity

No toxicity to reproduction in animal studies. Reproductive toxicity

Not teratogenic in animal studies. **Teratogenicity**

STOT - single exposure No information available.

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STOT - repeated exposure Target organ effects Aspiration hazard No information available. kidney, digestive system No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability Florasulam: Not readily biodegradable.

Bioaccumulation Florasulam. Does not bioaccumulate.

Mobility Florasulam: Very mobile; has potential to reach groundwater.

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 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

DOT NOT REGULATED

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 Florasulam.

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (florasulam), 9, PGIII, Marine

Pollutant

ICAO/IATA

UN/ID no UN3082

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

Hazard class 9
Packing Group III

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (florasulam), 9, PGIII, Marine

Pollutant

IMDG/IMO

UN/ID no UN3082

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

Hazard class 9
Packing Group III
EmS No. F-A, S-F
Marine Pollutant Florasulam

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (florasulam), 9, PGIII, Marine

Pollutant

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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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic health hazard	No
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
Sodium Hydroxide	1000 lb			X
1310-73-2				

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
Sodium Hydroxide	1000 lb	
1310-73-2	454 kg	
Methyl ethyl ketone	5000 lb	
78-93-3	2270 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.

Keep out of reach of children.

May cause slight eye irritation.

This product is highly toxic to green algae and aquatic plants.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol	X		X
57-55-6			

International Inventories

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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	Х	Х	Х	X	X	Х	X

CANADA

WHMIS Statement

This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

This product is a Pest Control Product and is not regulated as a Controlled Product under the Hazardous Products Act (HPA).

Domestic Substances List (DSL): All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

WHMIS Hazard Class Non-controlled

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16. OTHER INFORMATION

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

^{*}Indicates a chronic health hazard.

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

Revision date: 2017-03-02 Reason for revision: Initial Release

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End of Safety Data Sheet