

SAFETY DATA SHEET
CF Herbicide

SDS #: 50002629
Revision date: 2022-01-24
Format: NA
Version 1.0



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name CF Herbicide

Other means of identification

Product Code(s) 50002629

Synonyms

CARFENTRAZONE-ETHYL:
ethyl α ,2-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate (CAS name);
ethyl (RS)-2-chloro-3-[2-chloro-5-(4-difluoromethyl-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl)-4-fluorophenyl] propionate (IUPAC name)

Active Ingredient(s) Chemical Carfentrazone-ethyl

Family Triazolinones

PCP # 34307

Recommended use of the chemical and restrictions on use

Recommended Use: Herbicide

Restrictions on Use: Use as recommended by the label.

Supplier Address

FMC of Canada Limited
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

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

Serious eye damage/eye irritation	Category 2
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GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Signal Word: Warning

Hazard Statements

H319 - Causes serious eye irritation



Precautionary Statements - Prevention

P264 - Wash hands thoroughly after handling

P273 - Avoid release to the environment

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

Precautionary Statements - Disposal

P501 - 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 with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Triazolinones.

Chemical name	CAS-No	Weight %
Carfentrazone-ethyl	128639-02-1	40
Crystalline silica, quartz	14808-60-7	<1
Naphthalene sulfonic acid-formaldehyde condensate, sodium salt	9084-06-4	15 - 20

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.

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. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	May cause eye irritation.
Indication of immediate medical attention and special treatment needed, if necessary	<p>Immediate medical attention is required in cases of ingestion. It may be helpful to show this safety data sheet to physician.</p> <p>Notes to physician: A specific antidote for exposure to this material is not known. Gastric lavage and/or the administration of activated charcoal can be considered. After decontamination, treatment should be directed at the control of symptoms and the clinical condition.</p>

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 ₂).
Large Fire	Water spray. Foam.
Unsuitable extinguishing media	Avoid heavy hose streams.
Specific Hazards Arising from the Chemical	None known
Hazardous Combustion Products	The essential breakdown products are volatile, toxic, irritant and inflammable compounds such as nitrogen oxides, hydrogen fluoride, hydrogen chloride, sulphur dioxide, carbon monoxide, carbon dioxide and various fluorinated and chlorinated organic compounds.
Explosion data	
Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate upwind.

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. Do not release to the environment.
Methods for Containment	Nearby surface water drains should be covered. Minor spills on the floor or other impervious surface should immediately be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with detergent and water. Do not let wash liquid enter drains or waterways. Absorb wash liquid with an inert absorbent such as universal binder, Fuller's earth, bentonite or other absorbent clay and collect in suitable containers. The used containers should be properly closed and labelled.

Methods for cleaning up Pick up and transfer to properly labeled containers.

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. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Wash thoroughly after handling. Remove contaminated clothing and shoes.

Storage Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Packaging material Must only be kept in original packaging.

Incompatible products None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Carfentrazone-ethyl (128639-02-1)	TWA: 1 mg/m ³	-	-	-
Crystalline silica, quartz (14808-60-7)	TWA: 0.025 mg/m ³	TWA: 50 µg/m ³	IDLH: 50 mg/m ³ TWA: 0.05 mg/m ³	Mexico: TWA 0.025 mg/m ³
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Crystalline silica, quartz (14808-60-7)	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.10 mg/m ³ respirable	TWA: 0.025 mg/m ³

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. Maintain eye wash fountain and quick-drench facilities in work area.

Skin and Body Protection Wear suitable protective clothing. Protective shoes or boots.

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 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	Granules
Physical State	Solid
Color	Off-white to beige
Odor	Latex
Odor threshold	No information available
pH	8.63
Melting point/freezing point	No information available
Boiling Point/Range	No information available
Flash point	Not applicable
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
Relative density	Pour density: 44.7 lbs/ft ³ (0.716 g/mL) Tap density: 45.9 lbs/ft ³ (0.735 g/mL)
Specific gravity	No information available
Water solubility	Emulsifies 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
Explosive properties	Not explosive
Oxidizing properties	Non-oxidizing
Molecular weight	No information available
Bulk density	Pour density: 44.7 lbs/ft ³ (0.716 g/mL) Tap density: 45.9 lbs/ft ³ (0.735 g/mL)

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	Heating of the product will produce harmful and irritant vapors.
Incompatible materials	None known.
Hazardous Decomposition Products	See Section 5 for more information.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral	> 5000 mg/kg (female rat)
LD50 Dermal	> 5000 mg/kg (rat) (male/female)
LC50 Inhalation (dust)	> 5.18 mg/L 4 hr (rat) (male/female)
Serious eye damage/eye irritation	Moderately irritating (rabbit).
Skin corrosion/irritation	Slightly irritating (rabbit).

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Sensitization Non-sensitizing (mice-LLNA).

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation (vapor)
Carfentrazone-ethyl (128639-02-1)	= 5143 mg/kg (rat)	> 4000 mg/kg (rat)	> 5 mg/L 4h (rat)
Naphthalene sulfonic acid-formaldehyde condensate, sodium salt (9084-06-4)	= 3800 mg/kg (Rat)		

Information on toxicological effects

Symptoms May cause eye irritation.

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

Chronic toxicity Long-term exposure caused neurotoxicity (body tremors, decreased motor activity), decreased body weight and increased liver and spleen weight
Mutagenicity Carfentrazone-ethyl : Not genotoxic in laboratory studies.
Carcinogenicity Carfentrazone-ethyl No evidence of carcinogenicity from animal studies.
Neurological effects Carfentrazone-ethyl Not neurotoxic.
Reproductive toxicity Carfentrazone-ethyl . No toxicity to reproduction in animal studies.
Developmental toxicity Carfentrazone-ethyl . Not teratogenic in animal studies.
STOT - single exposure Not classified.
STOT - repeated exposure Not classified.
Neurological effects Carfentrazone-ethyl Not neurotoxic.
Aspiration hazard The product does not present an aspiration pneumonia hazard.

Chemical name	ACGIH	IARC	NTP	OSHA
Crystalline silica, quartz 14808-60-7	A2	Group 1	Known	X

Legend:

- ACGIH (American Conference of Governmental Industrial Hygienists)**
- A2 - Suspected Human Carcinogen
- IARC (International Agency for Research on Cancer)**
- Group 1 - Carcinogenic to Humans
- NTP (National Toxicology Program)**
- Known - Known Carcinogen
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)**
- X - Present

12. ECOLOGICAL INFORMATION

Ecotoxicity

Carfentrazone-ethyl (128639-02-1)				
Active Ingredient(s)	Duration	Species	Value	Units
	72 h EC50	Algae	0.012	mg/L
	96 h LC50	Rainbow trout	1.6	mg/L
	48 h LC50	Daphnia	>9.8	mg/L
	96 h NOEC	Algae	1.0	µg/L
	21 d NOEC	Fish	0.0187	mg/L
	21 d NOEC	Crustacea	0.22	mg/L
	LC50	Eisenia fetida	> 820	mg/kg
	LD50 Oral	Bee	> 200	µg/bee
	LD50 contact	Bee	> 200	µg/bee
	LD50 acute oral	Northern bobwhite	>2250	mg/kg
	LD50 Oral	Bobwhite quail	>2000	mg/kg

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Carfentrazone-ethyl	EC50 = 12 µg/l	96 h LC50 = 1,6 mg/L&0,0187	48 h EC50 > 9,8 mg/L&0,22

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128639-02-1	14d EC50 = 0,0057 mg/L		
Sodium Benzoate 532-32-1		96 h LC50: 420 - 558 mg/L (Pimephales promelas) flow-through 96 h LC50: > 100 mg/L (Pimephales promelas) static	48 h EC50: < 650 mg/L (Daphnia magna)
Bis(2-ethylhexyl) sodium sulfosuccinate 577-11-7		96 h LC50: 20 - 40 mg/L (Oncorhynchus mykiss) semi-static 96 h LC50: < 24 mg/L (Oncorhynchus mykiss) static 96 h LC50: = 37 mg/L (Lepomis macrochirus) static	48 h EC50: = 36 mg/L (Daphnia magna)

Persistence and degradability Carfentrazone-ethyl . Non-persistent. Readily hydrolyzed. Not readily biodegradable.

Bioaccumulation Carfentrazone-ethyl . The substance does not have a potential for bioconcentration.

Mobility Carfentrazone-ethyl . Not relevant.

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.

14. TRANSPORT INFORMATION

DOT This material is not a hazardous material as defined by U.S. Department of Transportation 49 CFR Parts 100 through 185, unless shipped in bulk packaging. The classification below pertains to the shipment in bulk packaging [(>119 gal, liquid) or (882 lb, solid)].

TDG Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

UN/ID no UN3077
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (carfentrazone-ethyl)
Hazard class 9
Packing Group III
Marine Pollutant Yes.
Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Carfentrazone-ethyl), 9, III, Marine Pollutant

ICAO/IATA

UN/ID no UN3077
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (carfentrazone-ethyl)
Hazard class 9
Packing Group III
Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Carfentrazone-ethyl), 9, III, Marine Pollutant

IMDG/IMO

UN/ID no UN3077
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (carfentrazone-ethyl)
Hazard class 9
Packing Group III
EmS No. F-A, S-F
Environmental Hazards Marine Pollutant
Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Carfentrazone-ethyl), 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 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	Yes
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

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:

Warning
Causes moderate eye irritation. DO NOT get in eyes.
Avoid breathing dust. Avoid contact with eyes, skin or clothing.
Wash thoroughly with soap and water after handling.

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
Crystalline silica, quartz 14808-60-7	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)
Carfentrazone-ethyl 128639-02-1					X			
Crystalline silica, quartz	X	X	X	X	X	X	X	X

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14808-60-7								
Naphthalene sulfonic acid-formaldehyde condensate, sodium salt 9084-06-4	X	X		X	X	X	X	X

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.

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

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

Revision date: 2022-01-22
Reason for revision: Initial Release

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End of Safety Data Sheet