



**Product Name:
Command Charge Herbicide**

Attached are the component product Safety Data Sheets (SDSs) which comprise
Command Charge Herbicide

Please review the attached SDS documents, for a full and complete understanding of the
hazards associated with each product before use.

Command® Charge A Herbicide PCP # 33558
SDS Date: 11/15/2019
Reference: 1693-5

Command® Charge B Herbicide PCP # 33535
SDS Date: 11/15/2019
Reference: 6165-7

Manufacturer/Distributor:

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104 USA

Product Information: 1-833-362-7722
Medical Emergency: 1-800-331-3148 (USA & Canada)
Preparation Date: November 15, 2019

SAFETY DATA SHEET
Command® Charge A Herbicide

SDS #: 1693-5-A
Revision date: 2019-11-15
Format: NA
Version 1



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Command® Charge A Herbicide

Other means of identification

Product Code(s) 1693-5-A

Synonyms Clomazone (F57020): 2-(2-chlorobenzyl)-4,4-dimethyl-1,2-oxazolidin-3-one (IUPAC name); 2-[(2-chlorophenyl)methyl]-4,4-dimethyl-3-isoxazolidinone (CAS Name)

Active Ingredient(s) Clomazone

Chemical Family Triazolinones

Alternate Commercial Name Command® 360 ME, Command® 36 CS, Command® 360 CS, Command® CS, Centium™ 36 CS, Cirrus™ 36 CS, Cirrus™ CS, Magister CS, Director CS

PCP # 33558

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)
SDS-Info@fmc.com (E-Mail General Information)

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)

Acute toxicity - Inhalation (Dusts/Mists)

Category 4

Skin sensitization	Category 1B
--------------------	-------------

GHS Label elements, including precautionary statements**EMERGENCY OVERVIEW**

<p>Warning</p> <p>Hazard Statements H317 - May cause an allergic skin reaction H332 - Harmful if inhaled</p> 
--

Precautionary Statements - Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves

Precautionary Statements - Response

P321 - Specific treatment (see supplemental first aid instructions on label)
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
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 with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Triazolinones.

Chemical name	CAS-No	Weight %
Clomazone	81777-89-1	31
Sodium Nitrate	7631-99-4	1-5
Calcium chloride	10043-52-4	1-5
1,6-hexanediamine (70%)	124-09-4	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 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, 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.

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

Symptoms of overexposure include decreased activity, tearing eyes, bleeding from the nose and incoordination.

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

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.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO₂), Water spray, Foam, Dry chemical.

Unsuitable extinguishing media

High volume water jet.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors

Explosion data

Sensitivity to Mechanical Impact

No information available.

Sensitivity to Static Discharge

No information available.

Protective equipment and precautions for firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

It is recommended to have a predetermined plan for the handling of spills. Empty, closable vessels for the collection of spills should be available.

In case of large spill (involving 10 tonnes of the product or more):

Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and rubber boots. Stop the source of the spill immediately if safe to do so. Keep unprotected persons away from the spill area.

Other

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

For emergency responders

Use personal protection recommended in Section 8.

Environmental Precautions

Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.

Methods for Containment

It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping. Use non-sparking tools and equipment. 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

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 damp cloth and/or strong industrial detergent with much water. Absorb wash liquid onto a suitable absorbent such as universal binder, attapulgite, bentonite or other absorbent clays and transfer contaminated absorbent to suitable containers. The used containers should be properly closed and labelled.
 spills which soak into the ground should be dug up and transferred to suitable containers. in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.

7. HANDLING AND STORAGE

Handling

In an industrial environment it is recommended to avoid all personal contact with the product, if possible by using closed systems with remote system control. Otherwise it is recommended to handle the material by mechanical means as much as possible. Adequate ventilation or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8. For its use as a pesticide, first look for precautions and personal protection measures on the officially approved label on the packaging or for other official guidance or policy in force. If these are lacking, see section 8. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Storage

Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/store only in original container.

Incompatible products

None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

To our knowledge, personal exposure limits have not been established for the active ingredient in this product.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
1,6-hexanediamine (70%) (124-09-4)	TWA: 0.5 ppm	-	-	Mexico: TWA 0.5 ppm
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Calcium chloride (10043-52-4)	-	-	TWA: 5 mg/m ³	-
1,6-hexanediamine (70%) (124-09-4)	TWA: 0.5 ppm	TWA: 0.5 ppm TWA: 2.3 mg/m ³	TWA: 0.5 ppm	TWA: 0.5 ppm TWA: 2.4 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 long-sleeved shirt, long pants, socks, and shoes.

Hand Protection

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

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	Brown Liquid
Physical State	Liquid
Color	Brown
Odor	Slight Aromatic
Odor threshold	No information available
pH	6.5 @ 20°C
Melting point/freezing point	Not applicable
Boiling Point/Range	No information available
Flash point	> 94 °C / > 201 °F Tag Closed Cup
Evaporation Rate	No information available
Flammability (solid, gas)	No information available Not flammable
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	9.59 lb/gal
Specific gravity	No information available
Water solubility	Dispersible 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	417-430 cps
@ 23° C	
Explosive properties	Not explosive
Oxidizing properties	No information available
Molecular weight	No information available
Bulk density	No information available

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	Heat, flames and sparks
Incompatible materials	None known.
Hazardous Decomposition Products	Carbon oxides (COx), Nitrogen oxides (NOx), Chlorine, Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral > 5000 mg/kg (rat)
 LD50 Dermal > 5000 mg/kg (rat)
 LC50 Inhalation > 3.86 mg/L 4 hr (rat) - Maximum attainable concentration (zero mortality)

Serious eye damage/eye irritation Non-irritating.
 Skin corrosion/irritation Non-irritating.
 Sensitization Did not cause sensitization on laboratory animals (mouse)

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Clomazone (81777-89-1)	1369 mg/kg	>2000 mg/kg	4 h LC50 = 4,8 mg/L
Sodium Nitrate (7631-99-4)	= 1267 mg/kg (Rat)		
Calcium chloride (10043-52-4)	= 1000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	
1,6-hexanediamine (70%) (124-09-4)	= 750 mg/kg (Rat)	= 1110 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms Large dosages of clomazone ingested by laboratory animals produced signs of toxicity including ataxia, decreased activity, oral discharge, lacrimation, bloody tears, and nasal discharge.

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

Chronic toxicity Clomazone: Long-term exposure caused slight liver weight increase and hepatocyte enlargement in animal studies.

Mutagenicity Clomazone: Not genotoxic in animal studies

Carcinogenicity Clomazone: No evidence of carcinogenicity from animal studies.

Neurological effects Clomazone: Not neurotoxic.

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

Developmental toxicity Clomazone: Not teratogenic in animal studies.

STOT - single exposure None under normal use conditions.

STOT - repeated exposure None under normal use conditions.

Target organ effects Clomazone: Liver

Neurological effects Clomazone: Not neurotoxic.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

Clomazone (81777-89-1)				
Active Ingredient(s)	Duration	Species	Value	Units
Clomazone	72 h EC50	Algae	0.136	mg/L
	48 h EC50	Crustacea	12.7	mg/L
	96 h LC50	Fish	15.5	mg/L
	21 d NOEC	Fish	2.30	mg/L
	21 d NOEC	Crustacea	2.2	mg/L

	96 h NOEC	Algae	0.05	mg/L
Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	
Calcium chloride 10043-52-4		96 h LC50: = 10650 mg/L (Lepomis macrochirus) static	48 h LC50: 2280000 - 3948000 µg/L (Daphnia magna)	
1,6-hexanediamine (70%) 124-09-4	96 h EC50: = 14.8 mg/L (Pseudokirchneriella subcapitata) 72 h EC50: = 15 mg/L (Pseudokirchneriella subcapitata)	96 h LC50: = 1825 mg/L (Pimephales promelas) static 96 h LC50: = 62 mg/L (Leuciscus idus) static 96 h LC50: > 56 mg/L (Lepomis macrochirus) static	48 h EC50: = 23.4 mg/L (Daphnia magna)	
Sodium Hydroxide 1310-73-2		96 h LC50: = 45.4 mg/L (Oncorhynchus mykiss) static		
Acetic Acid 64-19-7		96 h LC50: = 75 mg/L (Lepomis macrochirus) static 96 h LC50: = 79 mg/L (Pimephales promelas) static	24 h EC50: = 47 mg/L (Daphnia magna) 48 h EC50: = 65 mg/L (Daphnia magna) Static	
Potassium chloride 7447-40-7	72 h EC50: = 2500 mg/L (Desmodesmus subspicatus)	96 h LC50: 750 - 1020 mg/L (Pimephales promelas) static 96 h LC50: = 1060 mg/L (Lepomis macrochirus) static	48 h EC50: = 825 mg/L (Daphnia magna) 48 h EC50: = 83 mg/L (Daphnia magna) Static	
Sodium Nitrate 7631-99-4		96 h LC50: 994.4 - 1107 mg/L (Oncorhynchus mykiss) static 96 h LC50: = 2000 mg/L (Lepomis macrochirus) static		
Sodium chloride 7647-14-5		96 h LC50: 4747 - 7824 mg/L (Oncorhynchus mykiss) flow-through 96 h LC50: 5560 - 6080 mg/L (Lepomis macrochirus) flow-through 96 h LC50: 6020 - 7070 mg/L (Pimephales promelas) static 96 h LC50: 6420 - 6700 mg/L (Pimephales promelas) static 96 h LC50: = 12946 mg/L (Lepomis macrochirus) static 96 h LC50: = 7050 mg/L (Pimephales promelas) semi-static	48 h EC50: 340.7 - 469.2 mg/L (Daphnia magna) Static 48 h EC50: = 1000 mg/L (Daphnia magna)	
Clomazone 81777-89-1	EC50 = 0.136 mg/L	96 h LC50 = 19 mg/L	48 h EC50 = 5.2 mg/L	

Persistence and degradability Clomazone: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.

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

Mobility Clomazone: Moderately mobile. Has some 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 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. It is recommended to consider possible ways of disposal in the following order:

1. Reuse or recycling should first be considered. Reuse is prohibited except by the authorisation holder. If offered for recycling, containers must be emptied and triply rinsed (or equivalent). Do not discharge rinsing water to sewer systems.
2. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
3. Delivery of the packaging to a licensed service for disposal of hazardous waste.
4. Disposal in a landfill or burning in open air should only occur as a last resort. For disposal in a landfill containers should be emptied completely, rinsed and punctured to make them

unusable for other purposes. If burned, stay out of smoke.

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 Not regulated

ICAO/IATA

UN/ID no UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s, (Clomazone)
Hazard class 9
Packing Group III
Description UN3082, Environmentally hazardous substance, liquid, n.o.s, Clomazone, 9, III

IMDG/IMO

UN/ID no UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s, (Clomazone)
Hazard class 9
Packing Group III
EmS No. F-A, S-F
Special Provisions Do not release to the environment
Marine Pollutant Yes
Description UN3082, Environmentally hazardous substance, liquid, n.o.s, Clomazone, 9, III

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 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
Sodium Hydroxide 1310-73-2	1000 lb			X
Acetic Acid 64-19-7	5000 lb			X

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 1310-73-2	1000 lb 454 kg	

Command® Charge A Herbicide

SDS #: 1693-5-A
 Revision date: 2019-11-15
 Version 1

Acetic Acid 64-19-7	5000 lb 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

Causes eye irritation.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium Nitrate 7631-99-4		X	X
1,6-hexanediamine (70%) 124-09-4	X	X	

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Clomazone 81777-89-1					X	X		
Sodium Nitrate 7631-99-4	X	X	X	X	X	X	X	X
Calcium chloride 10043-52-4	X	X	X	X	X	X	X	X
1,6-hexanediamine (70%) 124-09-4	X	X	X	X	X	X	X	X

Mexico - Grade

Moderate risk, Grade 2

Chemical name	Carcinogen Status	Mexico
1,6-hexanediamine (70%)		Mexico: TWA 0.5 ppm

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
Methylene diphenyl diisocyanate (polymeric)	100 5000 kg/yr	100 kg/yr

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.

WHMIS Hazard Class

D2B - Toxic materials



16. OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 2*	Flammability 1	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: 2019-11-15
Reason for revision: SDS sections updated

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Prepared By:

FMC Corporation

FMC Logo - Trademark of FMC Corporation

© 2019 FMC Corporation. All Rights Reserved.

End of Safety Data Sheet

SAFETY DATA SHEET
Command® Charge B Herbicide

SDS #: 6165-7-A
Revision date: 2019-11-15
Format: NA
Version 1



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Command® Charge B Herbicide

Other means of identification

Product Code(s) 6165-7-A

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) Carfentrazone-ethyl

Chemical Family Triazolinones

PCP # 33535

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)
SDS-Info@fmc.com (E-Mail General Information)

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)

Carcinogenicity	Category 2
Aspiration toxicity	Category 1

GHS Label elements, including precautionary statements**EMERGENCY OVERVIEW****Danger****Hazard Statements**

H304 - May be fatal if swallowed and enters airways

H351 - Suspected of causing cancer

**Precautionary Statements - Prevention**

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

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

Precautionary Statements - Response

P308 + P313 - If exposed or concerned: Get medical advice/attention

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

Precautionary Statements - Storage

P405 - Store locked up

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

May be harmful if swallowed. Very toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical Family** Triazolinones.

Chemical name	CAS-No	Weight %
Naphtha (petroleum), heavy aromatic	64742-94-5	<70
2-Methylnaphthalene*	91-57-6	<30
Carfentrazone-ethyl	128639-02-1	21.9
1-Methylnaphthalene*	90-12-0	<20
n-Butanol	71-36-3	1-5
Naphthalene*	91-20-3	0.1-1

* This component is a constituent(s) of the ingredient: Naphtha (petroleum), heavy aromatic.
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.

Ingestion

Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Central nervous system effects. Gastrointestinal effects.

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

Treatment is symptomatic and supportive. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Foam. Dry powder.

Specific Hazards Arising from the Chemical

Slightly combustible. May support combustion at elevated temperatures.

Explosion data

Sensitivity to Mechanical Impact
Sensitivity to Static Discharge

No information available.
 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.

Methods for Containment

Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up

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

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

Storage

Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/store only in original container.

Incompatible products

Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
2-Methylnaphthalene* (91-57-6)	TWA: 0.5 ppm	-	-	Mexico: TWA 0.5 ppm
Carfentrazone-ethyl (128639-02-1)	TWA: 1 mg/m ³	-	-	-
1-Methylnaphthalene* (90-12-0)	TWA: 0.5 ppm	-	-	Mexico: TWA 0.5 ppm
n-Butanol (71-36-3)	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m ³	IDLH: 1400 ppm Ceiling: 50 ppm Ceiling: 150 mg/m ³	Mexico: TWA 20 ppm
Naphthalene* (91-20-3)	TWA: 10 ppm	TWA: 10 ppm TWA: 50 mg/m ³	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³	Mexico: TWA 10 ppm Mexico: TWA 50 mg/m ³ Mexico: STEL 15 ppm
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
2-Methylnaphthalene* (91-57-6)	TWA: 0.5 ppm Skin	-	TWA: 0.5 ppm Skin	-
1-Methylnaphthalene* (90-12-0)	TWA: 0.5 ppm Skin	-	TWA: 0.5 ppm Skin	-
n-Butanol (71-36-3)	TWA: 15 ppm Ceiling: 30 ppm	Ceiling: 50 ppm Ceiling: 152 mg/m ³ Skin	TWA: 20 ppm	TWA: 20 ppm TWA: 60 mg/m ³
Naphthalene* (91-20-3)	TWA: 10 ppm Skin	TWA: 10 ppm TWA: 52 mg/m ³ STEL: 15 ppm STEL: 79 mg/m ³	TWA: 10 ppm Skin	TWA: 10 ppm TWA: 52 mg/m ³ STEL: 15 ppm STEL: 79 mg/m ³ Skin

Legend

Skin (S*) - Skin Absorber

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. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion and the contact time.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Physical State	Liquid
Color	Brown orange
Odor	Aromatic
Odor threshold	No information available
pH	5.3 (1% solution)
Melting point/freezing point	Not applicable
Boiling Point/Range	No information available
Flash point	75.6 °C / 168.08 °F Closed cup
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	9.0 lb/gal
Specific gravity	1.08
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	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Molecular weight	No information available
Bulk density	No information available

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	Heat, flames and sparks
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide (CO). Carbon dioxide (CO ₂). Hydrogen chloride. Hydrogen fluoride. Nitrogen oxides (NO _x). Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral	4077 mg/kg (rat)
LD50 Dermal	> 4000 mg/kg (rat)
LC50 Inhalation	> 6.31 mg/L 4 hr (rat)
Serious eye damage/eye irritation	Mildly irritating.
Skin corrosion/irritation	Mildly irritating (rabbit).
Sensitization	Non-sensitizing

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Naphtha (petroleum), heavy aromatic (64742-94-5)	300-2000 mg/kg	> 2 mL/kg (Nyúl)	>5,2 mg/L
2-Methylnaphthalene* (91-57-6)	= 1630 mg/kg (Rat)		
Carfentrazone-ethyl (128639-02-1)	= 5143 mg/kg (rat)	> 4000 mg/kg (rat)	> 5 mg/L 4h (rat)
1-Methylnaphthalene* (90-12-0)	= 1840 mg/kg (Rat)		
n-Butanol (71-36-3)	= 700 mg/kg (Rat) = 790 mg/kg (Rat)	= 3400 mg/kg (Rabbit) = 3402 mg/kg (Rabbit)	> 8000 ppm (Rat) 4 h
Naphthalene* (91-20-3)	= 1110 mg/kg (Rat) = 490 mg/kg (Rat)	= 1120 mg/kg (Rabbit) > 20 g/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 h

Information on toxicological effects

Symptoms Signs of toxicity in laboratory animals included mydriasis, cyanosis, ataxia, dyspnea, lacrimation, and diarrhea.

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. There was no evidence of carcinogenic activity of naphthalene in male mice, but there was some evidence of carcinogenic activity in female mice and clear evidence of carcinogenic activity in male and female rats in 2-year inhalation studies conducted by the National Toxicology Program (NTP).

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 Potential for aspiration if swallowed. Vomiting after ingestion of this product may cause aspiration of aromatic hydrocarbons into the lungs, which may result in fatal pulmonary edema.

Chemical name	ACGIH	IARC	NTP	OSHA
Naphthalene* 91-20-3	A3	Group 2B	Reasonably Anticipated	X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human 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	Fish	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 Dietary	Mallard duck Anas platyrhynchos	> 5620	ppm
	LD50 Dietary	Bobwhite quail Colinus virginianus	> 5620	ppm
	LD50 Oral	Bee	> 200	µg/bee
	LD50 contact	Bee	> 200	µg/bee

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Carfentrazone-ethyl 128639-02-1	EC50 = 12 µg/l 14d EC50 = 0.0057 mg/L	96 h LC50 = 1.6 mg/L	48 h EC50 = 9.8 mg/L
Naphtha (petroleum), heavy aromatic 64742-94-5	72 h EC50: = 2,5 mg/L (Skeletonema costatum)	96 h LC50: = 1740 mg/L (Lepomis macrochirus) static 96 h LC50: = 19 mg/L (Pimephales promelas) static 96 h LC50: = 2,34 mg/L (Oncorhynchus mykiss) 96 h LC50: = 41 mg/L (Pimephales promelas) 96 h LC50: = 45 mg/L (Pimephales promelas) flow-through	48 h EC50: = 0,95 mg/L (Daphnia magna)
n-Butanol 71-36-3	72 h EC50: > 500 mg/L (Desmodesmus subspicatus) 96 h EC50: > 500 mg/L (Desmodesmus subspicatus)	96 h LC50: 100000 - 500000 µg/L (Lepomis macrochirus) static 96 h LC50: 1730 - 1910 mg/L (Pimephales promelas) static 96 h LC50: = 1740 mg/L (Pimephales promelas) flow-through 96 h LC50: = 1910000 µg/L (Pimephales promelas) static	48 h EC50: 1897 - 2072 mg/L (Daphnia magna) Static 48 h EC50: = 1983 mg/L (Daphnia magna)
Naphthalene* 91-20-3	72 h EC50: = 0.4 mg/L (Skeletonema costatum)	96 h LC50: 0.91 - 2.82 mg/L (Oncorhynchus mykiss) static 96 h LC50: 5.74 - 6.44 mg/L (Pimephales promelas) flow-through 96 h LC50: = 1.6 mg/L (Oncorhynchus mykiss) flow-through 96 h LC50: = 1.99 mg/L (Pimephales promelas) static 96 h LC50: = 31.0265 mg/L (Lepomis macrochirus) static	48 h EC50: 1.09 - 3.4 mg/L (Daphnia magna) Static 48 h EC50: = 1.96 mg/L (Daphnia magna) Flow through 48 h LC50: = 2.16 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 : Mobility in soil: 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. Do not reuse or refill this container.

14. TRANSPORT INFORMATION

DOT Not regulated for transportation if shipped in Non Bulk packaging. The classification below pertains to the shipment in Bulk packaging.

UN/ID no UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Carfentrazone-ethyl)
Hazard class 9
Packing Group III
Reportable Quantity (RQ) Naphthalene (100 lb)
Marine Pollutant Carfentrazone-ethyl .
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Carfentrazone-ethyl), 9, III

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. (Carfentrazone-ethyl)
Hazard class 9
Packing Group III
Marine Pollutant Carfentrazone-ethyl .
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Carfentrazone-ethyl), 9, III, Marine Pollutant

ICAO/IATA

UN/ID no UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Carfentrazone-ethyl)
Hazard class 9
Packing Group III
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Carfentrazone-ethyl), 9, III, Marine Pollutant

IMDG/IMO

UN/ID no UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Carfentrazone-ethyl)
Hazard class 9
Packing Group III
EmS No. F-A, S-F
Marine Pollutant Carfentrazone-ethyl
Description UN3082, Environmentally hazardous substance, liquid, 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 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 %
n-Butanol - 71-36-3	71-36-3	1-5	1.0
Naphthalene* - 91-20-3	91-20-3	0.1-1	0.1

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic health hazard Yes

Command® Charge B Herbicide

SDS #: 6165-7-A
Revision date: 2019-11-15
Version 1

Fire hazard Yes
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
Naphthalene* 91-20-3	100 lb	X	X	X

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
n-Butanol 71-36-3	5000 lb 2270 kg	
Naphthalene* 91-20-3	100 lb 45.4 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

*Harmful if swallowed, absorbed through the skin or inhaled. Causes moderate eye irritation.
Carfentrazone-ethyl is very toxic to algae and moderately toxic to fish.*

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65
Naphthalene* - 91-20-3	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-Methylnaphthalene* 91-57-6	X		
1-Methylnaphthalene* 90-12-0	X	X	X
n-Butanol 71-36-3	X	X	X
Naphthalene* 91-20-3	X	X	X

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Naphtha (petroleum),	X	X	X		X	X	X	X

Command® Charge B Herbicide

SDS #: 6165-7-A
 Revision date: 2019-11-15
 Version 1

heavy aromatic 64742-94-5								
2-Methylnaphthalene* 91-57-6	X	X	X	X	X	X	X	X
Carfentrazone-ethyl 128639-02-1					X			
1-Methylnaphthalene* 90-12-0	X	X	X	X	X	X	X	X
n-Butanol 71-36-3	X	X	X	X	X	X	X	X
Naphthalene* 91-20-3	X	X	X	X	X	X	X	X

Mexico - Grade Serious risk, Grade 3

Chemical name	Carcinogen Status	Mexico
2-Methylnaphthalene*		Mexico: TWA 0.5 ppm
1-Methylnaphthalene*		Mexico: TWA 0.5 ppm
n-Butanol		Mexico: TWA 20 ppm
Naphthalene*		Mexico: TWA 10 ppm Mexico: TWA 50 mg/m ³ Mexico: STEL 15 ppm

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.

WHMIS Hazard Class

B3 - Combustible liquid
 D2A - Very toxic materials



16. OTHER INFORMATION

NFPA	Health Hazards 1	Flammability 2	Instability 0	Special Hazards -
HMIS	Health Hazards 1*	Flammability 2	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:

2019-11-15

Reason for revision:

SDS sections updated

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared By:

FMC Corporation

FMC Logo - Trademark of FMC Corporation

© 2019 FMC Corporation. All Rights Reserved.

End of Safety Data Sheet