

SAFETY DATA SHEET

Shark® H2O

SDS #: 6307-A
Revision date: 2015-04-20
Format: NA
Version 1.01



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Shark® H2O

Other means of identification

Product Code(s) 6307-A

Synonyms CARFENTRAZONE-ETHYL (FMC 116426): 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 Triazolones

Recommended use of the chemical and restrictions on use

Recommended Use: Herbicide

Restrictions on Use: Use as recommended by the label

Manufacturer Address

FMC Corporation
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (E-Mail General Information)

Emergency telephone number

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)
Medical Emergencies:
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

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

The product contains no substances which at their given concentration, are considered to be hazardous to health

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 Triazolones.

| Chemical name | CAS-No | Weight % |
|---------------------|-------------|----------|
| Carfentrazone-ethyl | 128639-02-1 | 45 |
| bentonite | 1302-78-9 | 1-10 |

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. |
| 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 | Treatment is symptomatic and supportive. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care. |

5. FIRE-FIGHTING MEASURES

| | |
|---|---|
| Suitable Extinguishing Media | Foam, Carbon dioxide (CO ₂), Soft stream or water fog only if necessary. |
| Specific Hazards Arising from the Chemical | Finely dispersed particles can form explosive mixtures in air. |
| Hazardous Combustion Products | Carbon oxides (CO _x), Nitrogen oxides (NO _x), Hydrogen chloride, Hydrogen fluoride. |
| Explosion data | |
| Sensitivity to Mechanical Impact | Not sensitive. |

Sensitivity to Static Discharge Not sensitive.

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) 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.

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

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

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 None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH | Mexico |
|------------------------|----------------------------|----------|--------------------------|---------|
| bentonite 1302-78-9 | TWA: 1 mg/m ³ | - | - | - |
| Chemical name | British Columbia | Quebec | Ontario TWAEV | Alberta |
| bentonite 1302-78-9 | TWA: 1.0 mg/m ³ | - | TWA: 1 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.

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

Hand Protection Protective gloves

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

Hygiene measures Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

General information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|-------------------------------------|------------------------------|
| Appearance | Light to dark brown, Solid |
| Physical State | Dry powder |
| Color | Brown |
| Odor | Slight Musty |
| Odor threshold | No information available |
| pH | 7.5 |
| Melting point/freezing point | Not applicable |
| 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 |
| Density | 0.5 g/cm ³ @ 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 | 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 | Excessive heat |
| Incompatible materials | None known. |
| Hazardous Decomposition Products | Carbon oxides (COx). Nitrogen oxides (NOx). Hydrogen chloride. Hydrogen fluoride. |

11. TOXICOLOGICAL INFORMATION

Product Information

| | |
|--|--------------------------------|
| LD50 Oral | > 5000 mg/kg (rat) |
| LD50 Dermal | > 5000 mg/kg (rat) |
| LC50 Inhalation | > 5.72 mg/L 4 hr (rat) |
| Serious eye damage/eye irritation | Minimally irritating. |
| Skin corrosion/irritation | Moderately irritating to skin. |

Sensitization Non-sensitizing

Information on toxicological effects

Symptoms Signs of toxicity with carfentrazone-ethyl, in laboratory animals, included tremors, abdominal gripping, mucoid anal discharge, bloody oral discharge, hypothermia, squinting eyes, lacrimation, and pink to orange-brown discoloration of urine.

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

Chronic toxicity Carfentrazone-ethyl: Long-term exposure caused hematotoxicity and deposit of porphyrin in the liver in animal studies.

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 No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Carfentrazone-ethyl (128639-02-1) | | | | |
|-----------------------------------|-----------|-----------|--------|-------|
| Active Ingredient(s) | Duration | Species | Value | Units |
| Carfentrazone-ethyl | 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 |

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.

Contaminated Packaging 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 at 49 CFR Parts 100 through 185.

TDG The "Marine Pollutant" marking is only applicable when shipped by vessel or air, and is not applicable when shipped only by road or rail in Canada.

| | |
|-----------------------------|---|
| UN/ID no | UN3077 |
| Proper Shipping Name | Environmentally hazardous substance, solid, n.o.s. |
| Hazard class | 9 |
| Packing Group | III |
| Description | UN3077, Environmentally hazardous substance, solid, n.o.s. (Carfentrazone-ethyl), 9, PG III, Marine Pollutant |

ICAO/IATA

| | |
|-----------------------------|---|
| UN/ID no | UN3077 |
| Proper Shipping Name | Environmentally hazardous substance, solid, n.o.s. |
| Hazard class | 9 |
| Packing Group | III |
| Description | UN3077, Environmentally hazardous substance, solid, n.o.s., 9, PG III |
| Limited quantity | 30 kg G |

IMDG/IMO

| | |
|-----------------------------|---|
| UN/ID no | UN3077 |
| Proper Shipping Name | Environmentally hazardous substance, solid, n.o.s. |
| Hazard class | 9 |
| Packing Group | III |
| EmS No. | F-A, S-F |
| Marine Pollutant | Carfentrazone-ethyl |
| Description | UN3077, Environmentally hazardous substance, solid, n.o.s. (Carfentrazone-ethyl), 9, PG 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:

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 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

International Inventories

| Component | TSCA (United States) | DSL (Canada) | EINECS/ELI NCS (Europe) | ENCS (Japan) | China (IECSC) | KECL (Korea) | PICCS (Philippines) | AICS (Australia) |
|---|----------------------------|-----------------|-------------------------------|-----------------|------------------|-----------------|------------------------|---------------------|
| Carfentrazone-ethyl 128639-02-1 (45) | | | | | X | | | |
| bentonite 1302-78-9 (1-10) | X | X | X | | X | X | X | X |

WHMIS Hazard Class D2A - Very toxic materials
D2B - Toxic materials

16. OTHER INFORMATION

| | | | | |
|-------------|-------------------------|-----------------------|--------------------------|------------------------------|
| NFPA | Health Hazards 2 | Flammability 1 | Instability 0 | Special Hazards - |
| HMIS | Health Hazards 2 | Flammability 0 | Physical hazard 0 | Personal Protection X |

Revision date: 2015-04-20
Revision note (M)SDS sections updated

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Prepared By:

End of Safety Data Sheet