

## Section 1 - Identification of the Material and Supplier

FMC New Zealand Limited  
6 Clayton Street  
Newmarket, Auckland 1023

24 Hour Medical Emergency: 0800 111 174  
Transport Emergency: 0800 387 668  
Technical Query & Customer Service: 0800 658 080  
(business hours)  
[www.fmccrop.nz](http://www.fmccrop.nz)

**Chemical nature:** Triazolinones  
**Trade Name:** Hammer Force® Herbicide  
**Product Use:** Herbicide  
**Creation Date:** November 2018  
**This version issued:** November, 2018 and is valid for 5 years from this date.  
**Poisons Information Centre:** Phone 0800 764766 from anywhere in New Zealand

## Section 2 - Hazards Identification



**GHS Signal word:** WARNING, ECOTOXIC

**HAZARD CLASSIFICATION:** 6.1E, 6.3B, 6.4A, 6.9B, 9.1A, 9.2A

### Hazard Statements

H305: May be harmful if swallowed and enters airways.  
H316: Causes mild skin irritation.  
H319: Causes serious eye irritation.  
H373: May cause damage to liver through prolonged or repeated exposure from repeated oral exposure at high doses.  
H400: Very toxic to aquatic life.

### Precautionary Statements – Prevention

P102: Keep out of reach of children  
P103: Read label before use.  
P264: Wash hands thoroughly after handling.  
P260: Do not breathe spray.  
P270: Do not eat, drink or smoke when using this product.  
P280: Wear protective gloves, clothing, eye and face protection.

### Precautionary Statements – Response

P101: If medical advice is needed, have product container or label at hand.  
P332+P313: If skin irritation occurs: Get medical advice/ attention.  
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.  
P314: Get medical advice/attention if you feel unwell.  
P391: Collect spillage.

### Precautionary Statements – Disposal

P501 - Dispose of contents/container to an approved waste disposal plant

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### Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	%
Carfentrazone-ethyl	128639-02-1	240 g/L
Aromatic hydrocarbon	64742-94-5	24
Other ingredients determined to be non-hazardous		Balance

### Section 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 Poisons Information Centre 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 Poisons Information Centre 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 Poisons Information Centre or doctor for further treatment advice.

**Ingestion** Immediately call a Poisons Information Centre or doctor. **DO NOT** induce vomiting unless told to do so by a Poisons Information Centre 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.

### Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**HAZCHEM Code:** 2X

**Extinguishing Media:** Foam, carbon dioxide or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

**Hazardous thermal (de)composition products:** On burning, will emit toxic fumes of carbon monoxide, carbon dioxide, oxides of nitrogen etc.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

**Protection of fire-fighters:** Isolate fire area. Evacuate downwind. Wear full protective clothing and self contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

<b>Flash point:</b>	>104°
<b>Upper Flammability Limit:</b>	No data.
<b>Lower Flammability Limit:</b>	No data.
<b>Autoignition temperature:</b>	No data.
<b>Flammability Class:</b>	Combustible liquid.

### Section 6 - Accidental Release Measures

**Personal precautions:** Avoid contact with skin and eyes. **DO NOT** inhale spray. Wear protective clothing and equipment. **DO NOT** eat, drink or smoke when using. Wash hands and face before meals and after work.

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**Environmental precautions:** Isolate and post spill area. Large spills should be dyked or covered to prevent dispersal. **DO NOT** allow material to enter sewers or bodies of water. Keep unprotected persons and animals out of the area.

**Methods for cleaning up:** Shovel or sweep up and dispose of in accordance with the requirements of the regional Council By-laws. To clean spill area, tools and equipment, wash with a solution of soap with a solution of soap, water and acetic acid (vinegar). Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected.

## Section 7 - Handling and Storage

**Handling:** Ensure containers are kept closed until using product. Avoid skin and eye contact. When opening the container and preparing or using the spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat and elbow-length PVC gloves and face shield or goggles. Wash hands after use.

**Storage:** Store in a cool, dry, well-ventilated place, out of direct sunlight. **DO NOT** use or store near heat. Keep out of reach of children and animals. **DO NOT** store near (or allow to contact) other pesticides, fertilizers, water, food or feed.

## Section 8 - Exposure Controls and Personal Protection

**Workplace exposure standards:**

**Exposure Standards outside the workplace:** No exposure standard has been established.

### Engineering measures

**Exposure control measures:** Use in well ventilated area only. Ventilate all transport vehicles prior to unloading. Keep containers closed when not in use.

**Personal Protective Equipment (PPE):**

**Detail specifications for equipment:**

**Work Clothing:** When mixing or applying the substance wear waterproof gloves, hat, eye protection, overalls footwear, and suitable respiratory protection. If clothing becomes contaminated with product, remove clothing immediately.

**Eye Protection:** Wear chemical protective goggles or face shield.

**Respiratory Protection:** If inhalation risk exists, wear a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides.

**Gloves:** Wear chemical protective gloves when handling this product. Inspect regularly for leaks. Wash the outside of the gloves with soap and water prior to removal.

**Personal hygiene:** Clean water should be available for washing in Case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

## Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	Uniform milky solution. White
<b>Odour:</b>	Slightly aromatic odour
<b>Boiling Point:</b>	No data
<b>Freezing/Melting Point:</b>	No data
<b>Volatiles:</b>	No data
<b>Vapour Pressure:</b>	No data
<b>Vapour Density:</b>	No data
<b>Specific Gravity or Density:</b>	1.07 ± 0.2 g/mL

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<b>Water Solubility:</b>	Emulsifiable
<b>pH:</b>	3 – 5.5
<b>Volatility:</b>	No data
<b>Odour Threshold:</b>	No data
<b>Evaporation Rate:</b>	No data
<b>Coeff Oil/water Distribution:</b>	No data
<b>Autoignition temp:</b>	No data

## Section 10 - Stability and Reactivity

**Stability:** Product is considered stable for at least 2 years when stored at ambient temperatures out of direct sunlight, in the original container.

**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), Hydrogen chloride, Hydrogen fluoride, Nitrogen oxides (NOx)..

## Section 11 - Toxicological Information

### Product Information

<b>LD50 Oral</b>	4077 mg/kg (rat)
<b>LD50 Dermal</b>	> 4000 mg/kg (rat)
<b>LC50 Inhalation</b>	> 6.31 mg/L 4 hr (rat) - Maximum attainable concentration (zero mortality)
<b>Serious eye damage/eye irritation</b>	Mildly irritating.
<b>Skin corrosion/irritation</b>	Mildly irritating (rabbit).
<b>Sensitization</b>	Based on a similar formulation, this product is not expected to produce skin sensitization.

### 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** 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. 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.

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**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 oedema.

## Section 12 - Ecological Information

### Environmental Toxicity:

#### Carfentrazone-ethyl (128639-02-1)

Active Ingredient(s)	Duration	Species	Value	Units
Carfentrazone-ethyl	72 h EC <sub>50</sub>	Algae	0.012	mg/L
	96 h LC <sub>50</sub>	Fish	1.6	mg/L
	48 h LC <sub>50</sub>	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
		a		

**DO NOT** contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

### Environmental Properties:

**Persistence and degradability** Carfentrazone-ethyl: Non-persistent. Readily hydrolysed. Not readily biodegradable.

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

**Mobility** Carfentrazone-ethyl: Mobility in soil: Not relevant.

**Other Adverse Effects** No information available

## Section 13 - Disposal Considerations

**Spills and Disposal:** Isolate and post spill area. Wear prescribed protective clothing and equipment. Large spills should be dyked or covered to prevent dispersal. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent, bleach or caustic) and add the solutions to the drums of wastes already collected. Label for contents. Dispose of drummed wastes, including decontamination solution, in accordance with requirements of the local Regional by-laws.

**Disposal of empty containers:** Triple rinse container and add residue to spray tank. Submit clean empty container for recycling through Agrecovery. If this is not possible, crush empty container and bury in landfill. If not available, bury containers below 500 mm in a disposal pit marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt.

## Section 14 - Transport Information

#### NZS 5433\*

Hammer® Force 1 L, 6 x 1 L, 4 L, 5 L, 4 x 4 L and 4 x 5 L can be shipped under Limited Quantity provisions in NZS 5433 as a non-dangerous good. Otherwise, the following classification may apply.

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Carfentrazone-ethyl)
Class	9
Packing group	III
Matters needing attention for transportation:	Hammer® Force 1 and 5 L can be shipped under Limited Quantity provisions in NZS 5433 as a non-dangerous good.

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**IMDG\***

Hammer® Force 1 L, 6 x 1 L, 4 L, 5 L, 4 x 4 L and 4 x 5 L can be shipped as a non-dangerous good as provided in section 2.10.2.7 of IMDG code. Otherwise, the following classification may apply.

UN number	3082
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Class	9
Packing group	III

**IATA\***

Hammer® Force 1 L, 6 x 1 L, 4 L, 5 L, 4 x 4 L and 4 x 5 L can be shipped as a non-dangerous good as provided in IATA special provision A197. Otherwise, the following classification may apply.

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Carfentrazone-ethyl)
Class	9
Packing group	III

**\* Matters needing attention for transportation:**

Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197. If the product meets these special provisions, it may be shipped in New Zealand as a non-dangerous goods under provisions in NZS 5433 code which accepts IMDG and IATA classification and/or Limited quantity volumes.

**Section 15 - Regulatory Information**

<b>ACVM Registered Number:</b>	P007983
<b>HSNO Approval Code:</b>	HSR000436

ADVICE TO PRODUCT USERS REGARDING HSNO CONTROLS: Users of this product should make reference to the New Zealand Hazardous Substances and New Organisms Act and Regulations for relevant risk management controls. Additional local requirements may be applicable in accordance with planning controls under the Resource Management Act. Refer to Environment Protection Authority publication; User Guide to the HSNO Controls Regulations. <http://www.epa.govt.nz>

**Section 16 - Other Information**

IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE  
POISONS INFORMATION CENTRE: 0800 764 766

**New Zealand Emergency Telephone**

24 hr Transport Emergency: 0800 387 668  
24 hr Emergency Medical Information: 0800 111 174

**This SDS contains only safety-related information. For other data see product literature.**

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

**SAFETY DATA SHEET**

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