

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

Chemical nature: An emulsifiable concentrate of Alpha cypermethrin.
Trade Name: Dominex 100®
Product Use: Insecticide
Creation Date: 9th Sept 2010
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



Statement of Hazardous Nature

Hazard classification: 3.1D, 6.1D, 6.3B, 6.9B, 9.1A, 9.3B, 9.4A

GHS Signal word: WARNING ECOTOXIC, COMBUSTIBLE LIQUID – KEEP AWAY FROM SOURCES OF IGNITION

Flammable liquids Category 4
Acute Toxicity Oral Category 4
Aspiration Hazard Category 1
Skin Corrosion /Irritation Category 2
Serious eye damage/eye irritation Category 2B
Specific Target Organ Toxicity - Single Exposure Category 3
Specific Target Organ toxicity - repeated exposure Category 2
Hazardous to aquatic environment Short term/Chronic Category 1

HAZARD STATEMENT:

H227: Combustible liquid.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H320: Causes eye irritation.
H335: May cause respiratory irritation.
H373: May cause damage to organs through prolonged or repeated exposure.
H410: Very toxic to aquatic life with long lasting effects.

PREVENTION

P102: Keep out of reach of children.
P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P260: Do not breathe fumes, mists, vapours or spray.
P262: Do not get in eyes, on skin, or on clothing.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P314: Get medical advice or attention if you feel unwell.

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P362: Take off contaminated clothing and wash before reuse.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE or doctor.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

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

P332+P313: If skin irritation occurs: Get medical advice.

P337+P313: If eye irritation persists: Get medical advice.

P391: Collect spillage.

P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used.

STORAGE

P405: Store locked up.

P410: Protect from sunlight.

P402+P404: Store in a dry place. Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

DISPOSAL

P501: Dispose of contents and containers as specified on the registered label.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	%
Alpha-cypermethrin	67375-30-8	10%
Aromatic hydrocarbon	64742-94-5	76%
Surfactant mixture		14%

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 in New Zealand and is available at all times. Have this SDS with you when you call.

Effects and symptoms: Harmful by inhalation. Harmful if swallowed. May cause sensitisation by inhalation and skin contact.

First-aid measures

Inhalation: Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. DO NOT SCRUB THE SKIN. Facial skin contact may cause temporary facial numbness.

Eye Contact: If concentrate is splashed in the eyes, flush with running water for at least 15 minutes. Take to hospital without delay.

Ingestion: If swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre 0800 Poison (0800 764 766) or a doctor immediately. If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Centre. Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Do not give anything by mouth to a semi-conscious or unconscious person.

Notes to physician: Alpha-cypermethrin, the active ingredient in this product is a pyrethroid insecticide. The formulation also contains liquid hydrocarbons that can cause severe pneumonitis or fatal pulmonary

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edema if aspirated. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise symptomatic and supportive. In cases of skin contact, it has been reported that topical applications of Vitamin E acetate was found to have very high therapeutic value, eliminating almost 100% of the skin pain associated with synthetic pyrethroids.

Section 5 - Fire Fighting Measures

HAZCHEM Code: 3Z

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 little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

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

Extinguishing Media: Soft stream water fog, foam, carbon dioxide, dry chemical

Hazardous thermal (de)composition products: Carbon monoxide, carbon dioxide, hydrogen cyanide, chlorine, and hydrogen chloride.

Protection of fire-fighters: Wear full protective clothing and self contained breathing apparatus. Do not breath smoke or gases.

Flash point: No data.

Section 6 - Accidental Release Measures

Personal precautions: Avoid contact with skin and eyes. Do not inhale spray. Wear long sleeved shirt, long pants, waterproof gloves and safety goggles or face shield. Do not eat, drink or smoke when using. Wash hands and face before meals and after work.

Environmental precautions: Dangerous to Fish: do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

Methods for cleaning up: In the case of spillage, contain and absorb spilled material with absorbent material such as sand clay or cat litter. 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 (ie organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected. Label for contents. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local Authorities

Section 7 - Handling and Storage

Handling: When mixing or applying, avoid contact with skin and eyes. Wear protective clothing, gloves and goggles. Do not eat or drink while using. Wash hands and face before meals and after work. Wash protective clothing after work.

Storage: Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs. This product is classified under HSNO as 6.1D and 9.1A, and storage of certain quantities may require bunding and signage. See the HAZNOTE for further information.

Packaging materials: Fluorinated HDPE Plastic.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits

TWA (mg/m³)

STEL (mg/m³)

Exposure limits have not been established by SWA for any of the significant ingredients in this product.

The ADI for Alpha-cypermethrin is set at 0.05mg/kg/day. The corresponding NOEL is set at 4.7mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, June 2014.

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No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Workplace Exposure Guidelines

Workplace exposure standards: No biological exposure limit allocated.

Exposure Standards outside the workplace: No exposure standards have been set for this product or the active ingredients.

Engineering measures

Exposure control measures: Handle in well ventilated areas, generally natural ventilation is adequate.

Personal Protective Equipment

Detail specifications for equipment:

Respiratory system: Do not inhale spray mist.

Hands: Waterproof gloves

Eye Protection: Goggles or face shield

Skin and body Protection: When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length and PVC gloves and goggles.

Hands: Elbow-length and PVC gloves

Eyes: Wear chemical goggles.

General Hygiene: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear straw coloured liquid.
Odour:	Aromatic Odour.
Boiling Point:	135°C
Freezing/Melting Point:	Not available.
Vapour Pressure:	Not available.
Vapour Density:	Not available.
Specific Gravity or Density:	0.92 @20°C
Water Solubility:	Not soluble in water.
Information for flammable material including:	Combustible liquid C1 62°C closed cup
pH:	5 – 6.5
Explosion properties:	Not explosive.
Oxidation properties:	Not an oxidizer.
Octanol/water partition coeff:	Log Pow of 5.0

Section 10 - Stability and Reactivity

Stability: Stable under normal conditions. Do not store below 4°C.

Conditions to Avoid: Extremes of temperatures

Materials to avoid: Oxidising agents

Hazardous decomposition Products: Refer to fire section.

Hazardous polymerization: Does not occur

Specific Data: None.

Hazardous reactions: None known.

Section 11 - Toxicological Information

This product has moderate inhalation, and low oral and dermal toxicity. It is practically non-irritating to the eyes and non-irritating to the skin. Large doses of bifenthrin ingested by laboratory animals produced signs of toxicity including convulsions, tremors and bloody nasal discharge. Bifenthrin does not cause acute delayed neurotoxicity. Experience to date indicates that contact with bifenthrin may occasionally produce skin sensations such as rashes, numbing, burning or tingling. These sensations are reversible and usually subside within 12 hours. These sensations are reversible and usually subside within 12 hours. In humans,

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ingestion of large amounts of propylene glycol has resulted in breathing and heartbeat, profuse sweating and seizures.

Acute toxicity – Oral: LD50: 790mg/kg (Rat)
Acute toxicity - Dermal: LD50: > 2,000mg/kg (Rabbit)
Acute toxicity – Inhalation: LC50 > 0.32 mg/litre, 4 hr (Rat)

Skin irritation: May irritate the skin.

Eye irritation: May cause sensitisation by repeated inhalation of spray. Breathing vapour can result in headaches, dizziness and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of coordination, impaired judgment and if exposure is prolonged, unconsciousness.

Sensitisation: Prolonged or repeated exposure may cause skin sensitisation. Exposure to alpha-cypermethrin can result in sensations of tingling especially in the face. The effects are transient and generally disappear in one to two days. Topical application of vitamin E cream is effective in reducing discomfort. The occurrence of 'facial sensations' is an indication of exposure. Under these circumstances work practices should be reviewed.

Chronic Toxicity

No data available on this formulation. In studies with laboratory animals, Alphacypermethrin Technical did not cause teratogenicity or reproductive toxicity. The overall results from a battery of genotoxicity studies indicate that alpha-cypermethrin is not considered to be genotoxic. Ames test results were negative. Kidney and liver damage is possible from over-exposure to aromatic hydrocarbons over long periods. Additionally, some reversible haematopoietic depression has been observed in animals with extended exposure to aromatic hydrocarbons.

Other information: Repeated exposure could result in peripheral nervous system damage.

Potential Health Effects

Inhalation:

Short Term Exposure: Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: This product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but if treated promptly, all should disappear once exposure has ceased.

Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short Term Exposure: This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. Because of the low viscosity of this product, it may directly enter the lungs if swallowed, or if subsequently vomited. Once in the lungs, it is very difficult to remove and can cause severe injury or death. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 12 - Ecological Information

Ecotoxicity

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Toxic to fish.

LC50 (96hr) for rainbow trout is 0.0028 mg/l.

LC50 (48 hr) for alpha cypermethrin is 0.0003 mg/l.

Bees: Toxic to bees. LD50 0.059 µg/bee.

Soil: Average field half life of alpha cypermethrin is 90 days.

Bioaccumulative potential: Has a very low potential for bioconcentration, and is not mobile in soil.

Birds: Not toxic to birds. LD50 for mallard duck is >10,000 mg/kg

Section 13 - Disposal Considerations

Methods of disposal: Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409.

CONTAINER DISPOSAL: Triple rinse container and add residue to spray tank. Burn if permitted and circumstances, especially wind direction allow, otherwise bury in landfill.

Section 14 - Transport Information

NZS 5433*

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

IMDG*

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

IATA*

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains bifenthrin)
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

ACVM Registered Number: P4141

HSNO Approval Code: HSR0000293

Section 16 - Other Information

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

Acronyms:

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Acronyms:

CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

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.

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