

Infosafe No™ 3NUNG	Issue Date : May 2019	ISSUED by NUFARMNZ
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 Product Name **KAISO® 50WG**

1. Identification

GHS Product Identifier	KAISO® 50WG
Product Code	01759
Product Type	Synthetic pyrethroid insecticide
Company Name	Nufarm NZ
Address	6 Manu Street, Otahuhu Auckland 2024 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150
Emergency phone number	0800 651 911
Email	nzinfo@nufarm.com
Recommended use of the chemical and restrictions on use	A synthetic pyrethroid insecticide for the control of foliar pests in amenity turf, beans, cereals, citrus, grapes, fodder beet, forage herbs, kumara, maize, onions, ornamentals, potatoes, plantain and plantain clover swards, pumpkins, sugar beet, sweetcorn, tomatoes, vegetables and forage brassicas and winter squash.
Other Information	This SDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. Hazard Identification

Other Information	6.1D acute toxicant, 6.3B skin irritant, 6.4A eye irritant, 6.9B organ toxicant, 9.1A aquatic toxicant, 9.3B terrestrial vertebrate toxicant, 9.4A terrestrial invertebrate toxicant TOXICITY Harmful - may be harmful if swallowed, inhaled or absorbed through the skin. May cause skin and eye irritation. May cause neurotoxicity and lung damage from repeated oral or inhalation exposure at high doses. ECOTOXIC Very toxic to aquatic organisms with long-lasting effects. Toxic to terrestrial vertebrates. Very toxic to terrestrial invertebrates.
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3. Composition/information on ingredients

Chemical Characterization	Solid		
Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Lambda- cyhalothrin technical	91465-08-6	50 g/kg
	Ingredients determined to be non-hazardous	-	30-60%w/w
	Perlite	93763-70-3	30-60%w/w

4. First-aid measures

First Aid Measures	For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. Begin artificial respiration if the victim is not breathing. Use mouth-to-nose rather than mouth-to-mouth. Obtain medical attention.
Inhalation	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. For advice, contact the National Poisons Centre (0800 764 766). Seek medical assistance immediately.
Skin	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. If a large area is affected seek medical assistance.

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Eye contact	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance. Remove contact lenses, if present and easy to do.
First Aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically. Exposure to lambda-cyhalothrin 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.

5. Fire-fighting measures

Suitable extinguishing media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	If involved in a fire, it may emit hydrogen chloride, hydrogen fluoride and oxides of carbon and nitrogen.
Special Protective Equipment for fire fighters	Full protective clothing and self-contained breathing apparatus.
Specific Methods	Keep up wind. Do not allow washings to reach sewage or effluent systems. Contain run-off and dispose of fire control water later.
Hazchem Code	2Z
Other Information	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: Not applicable

6. Accidental release measures

Spills & Disposal	Wear protective clothing. Clear area of unprotected personnel. Sweep up solids without generating dust (use water to dampen). Contain and absorb liquid spills with inert material and place in waste containers. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill. Wash area with water and absorb with further inert material. Dispose of waste safely in an approved landfill.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.
Environmental Precautions	Prevent from entering drains, waterways or sewers.

7. Handling and storage

Precautions for Safe Handling	Avoid skin and eye contact and inhalation of spray mist. APPROVED HANDLER: This product must be under the control of an approved handler when it is applied in a wide dispersive manner, or used by a commercial contractor. TRACKING: Is not required RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3kg or more is applied within 24 hours. Do not apply when bees are actively foraging. Avoid direct application to bee hives. Do not apply onto or into water.
Conditions for safe storage, including any incompatibilities	Keep out of reach of children. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertilisers and seeds. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100kg of KAISO 50WG are subject to signage, and more than 100kg require emergency response plans.
Other Information	Always read the label and any attached leaflet before use. Aggregate Storage Volume Thresholds: When stored with substances of the same hazard classification the aggregate quantity must be considered. For full details refer to the current NZS8409 Management of Agrichemicals and the HSNO Regulations.

8. Exposure controls/personal protection

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Occupational exposure limit values	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product. The NZ MBIE has set WES for the following components: WES TWA for Perlite = 10mg/m ³ WES TWA for Talc = 2mg/m ³ (respirable dust)
Appropriate engineering controls	Handle in well ventilated areas, generally natural ventilation is adequate. Local exhaust ventilation may be required in confined spaces.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, washable hat, dust mask, cotton overalls buttoned to the neck and wrist, and boots.
Hygiene Measures	Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

9. Physical and chemical properties

Form	Solid
Appearance	Tan granule
Odour	Acid-like odour
Solubility in Water	Disperses in water.
pH	4.0
Vapour Pressure	2 x 10 ⁻⁴ mPa @ 20°C, est. for lambda-cyhalothrin
Partition Coefficient: n-octanol/water	Kow Log P = 7 @ 20°C for lambda-cyhalothrin
Density	0.577g/ml (tapped)
Flammability	Non-combustible
Other Information	(WG) Water Dispersible Granule

10. Stability and reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Conditions to Avoid	Excessive heat and fire.
Incompatible Materials	Strong oxidizing agents, alkalis and acids.
Hazardous Decomposition Products	Under fire conditions may produce gases such as hydrogen chloride, hydrogen fluoride, and oxides of carbon and nitrogen.
Hazardous Polymerization	Hazardous polymerisation will not occur.

11. Toxicological Information

Toxicology Information	No specific toxicological data is available for this product. Data below is for constituents.
Acute Toxicity - Oral	LD50 (rat) 56 mg/kg for lambda-cyhalothrin LD50 (mouse) 20mg/kg for lambda-cyhalothrin
Acute Toxicity - Dermal	LD50 (rat) 632 mg/kg for lambda-cyhalothrin
Acute Toxicity - Inhalation	LC50 (rat) 0.06mg/L/4h for lambda-cyhalothrin
Ingestion	Possible symptoms of exposure include: Coughing and abdominal pain.
Inhalation	Breathing in high concentrations of dusts or aerosols of this product may result in a burning sensation, cough, convulsions, laboured breathing, shortness of breath or sore throat.
Skin	Exposure to KAISO 50WG 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. Prolonged or repeated exposure may cause skin sensitisation.

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Eye	Will irritate the eyes.
Skin Sensitisation	Prolonged and repeated skin contact may result in skin sensitisation. Skin contact may produce skin sensations such as numbing, burning and tingling. These sensations are reversible and usually subside within 12 hours.
Chronic Effects	Regular exposure may result in effects on the lungs and central nervous system.
Serious eye damage/irritation	The product is an eye irritant.
Skin corrosion/irritation	The product is a skin irritant.
Other Information	The Australian Acceptable Daily Intake (ADI) for lambda-cyhalothrin for a human is 0.001 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', March 2013).

12. Ecological information

Persistence and degradability	Lambda cyhalothrin is rapidly degraded in soil; TD50 (microbial degradation)= 23 - 92 days, TD50 (field soil)= 6 - 40 days.
Basis for Assessment	Strongly adsorbed to soil and sediment organic matter, Koc = 330,000. Ecotoxicological data have not been determined specifically for this product.
Acute Toxicity - Fish	LC50 (96hr) bluegill sunfish = 0.21µg/L for lambda-cyhalothrin LC50 (96hr) rainbow trout = 0.36µg/L for lambda-cyhalothrin
Acute Toxicity - Daphnia	EC50 (48hr) daphnia = 0.36µg/L for lambda-cyhalothrin
Acute Toxicity - Algae	EC50 (48hr) Gammarus pulex Scud = 0.0068µg/L for lambda-cyhalothrin
Acute Toxicity - Other Organisms	ErC50 (96hr) for Selenastrum capricornutum = >1,000µg/L for lambda-cyhalothrin Birds: LD50 for mallard duck = >3,950mg/kg for lambda-cyhalothrin Bees: LD50 (oral) 38ng/bee; (contact) 909ng/bee for lambda-cyhalothrin Worms: LC50 for Eisenia foetida = >1,000mg/kg soil for lambda-cyhalothrin

13. Disposal considerations

Product Disposal	Dispose of product only by using according to the label, or at an approved landfill.
Container Disposal	Triple rinse empty container and add rinsate to spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

14. Transport information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
U.N. Number	3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. - (lambda-cyhalothrin, 5%)
Transport hazard class(es)	9
Hazchem Code	2Z
Packaging Method	-
Packing Group	III
EPG Number	-
IERG Number	47
IMO Marine Pollutant	Yes. Environmentally Hazardous Substance mark required.
IMDG EMS	F-A, S-F
Other Information	Do not carry more than 3kg of KAISO 50WG on a passenger service vehicle. Segregation: Check the latest Land Transport Rule Dangerous Goods Rule 45001 for additional information. Sea transport may require additional segregation. Refer NZS5433 sea segregation for details.



Safety Data Sheet

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15. Regulatory information

National and or International Regulatory Information Registered pursuant to the ACVM Act 1997, No. P8819
See www.foodsafety.govt.nz for registration conditions
Approved pursuant to the HSNO Act 1996, Approval Code HSR100829
See www.epa.govt.nz for approval controls.

Packaging & Labelling TOXIC * ECOTOXIC - keep out of reach of children

Hazard Rating Systems NFPA/HMIS: 2-1-0

Hazard Category HARMFUL * ECOTOXIC - Keep out of reach of children

16. Other Information

Date of preparation or last revision of SDS September 2016

Contact Person/Point IN AN EMERGENCY, DIAL 111 - FIRE OR POLICE
24Hr Tollfree Emergency No: 0800 651 911
24Hr Emergency No: National Poisons Centre Phone: 0800 764 766

Revisions Highlighted Other Information Addition of new label claims.
Supersedes SDS issued September 2016.
...End Of MSDS...

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