

Infosafe No™ 3NUNG	Issue Date : September 2016	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 Fax: 0-9-270-4159
Emergency phone number	0800 651 911
Email	info@nz.nufarm.com
Recommended use of the chemical and restrictions on use	A synthetic pyrethroid insecticide for the control of foliar pests and cutworm in beans, cereals, vegetable and forage brassicas, citrus, grapes, maize, onions, potatoes and tomatoes.
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	Solid		
Characterization			
Ingredients	Name	CAS	Proportion
	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.
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

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First Aid Facilities easy to do.
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 If involved in a fire, it may emit hydrogen chloride, hydrogen fluoride and oxides of carbon and nitrogen.

Products

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

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:

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Appropriate engineering controls	WES TWA for Perlite = 10mg/m ³
Personal Protective Equipment	WES TWA for Talc = 2mg/m ³ (respirable dust) Handle in well ventilated areas, generally natural ventilation is adequate. Local exhaust ventilation may be required in confined spaces.
Hygiene Measures	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. 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.
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

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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.

15. Regulatory information



Safety Data Sheet

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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	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 August 2013

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
Hazchem code changed from 2X to 2Z.

Revisions Highlighted

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