




Infosafe No™ 3NULC	Issue Date : February 2024	ISSUED by NUFARMNZ
Product Name NANDO®		

Section 1 - Identification

Product Identifier	NANDO®
Product Code	02995
Product Type	Fungicide
Company Name	Nufarm NZ
Address	Central Park, Building 3, Level 4, 666 Great South Road Ellerslie Auckland 1051 New Zealand
Telephone/Fax Number	Tel: 0-9-270 4150
Emergency Phone Number	0800 651 911
Email	nzinfo@nufarm.com
Recommended uses and any restrictions on use or supply	For the control of a wide range of diseases in grapes, field tomatoes, potatoes, and vegetable brassicas.
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.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture	Acute inhalation toxicity: Category 4 Reproductive toxicity: Category 2 Specific target organ toxicity - repeated exposure: Category 2 Hazardous to the aquatic environment acute Category 1 Hazardous to the aquatic environment chronic Category 1
Signal Word (s)	WARNING
Hazard Statement (s)	H332 Harmful if inhaled H361 Suspected of damaging fertility or the unborn child H373 May cause damage to organs through prolonged or repeated exposure H410 Very toxic to aquatic life with long lasting effects
Precautionary Statement – General	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read carefully and follow all instructions.
Pictogram (s)	Exclamation mark, Health hazard, Environment
	  
Precautionary Statement – Prevention	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment.
Precautionary Statement – Response	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 IF exposed or concerned: Get medical advice/attention. P312 Call a POISON CENTER/doctor if you feel unwell. P314 Get medical advice/attention if you feel unwell. P391 Collect spillage.
Precautionary Statement – Storage	P405 Store locked up.

Infosafe No™ 3NULC	Issue Date : February 2024	ISSUED by NUFARMNZ
--------------------	----------------------------	--------------------

Product Name **NANDO®**

Precautionary Statement – Disposal P501 Dispose of contents/container to an approved landfill.

Section 3 - Composition and Information on Ingredients

Chemical Characterization Liquid

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Fluazinam	79622-59-6	500 g/L
	Ingredients determined to be non-hazardous	-	Balance

Section 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	Remove contact lenses, if present and easy to do. Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance even if there are no immediate symptoms.
First-aid Facilities	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Advice to Doctor	Treat symptomatically.

Section 5 - Firefighting Measures

Suitable Extinguishing Media	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material. Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	If involved in a fire, it may emit fluorine compounds, oxides of nitrogen and hydrogen chloride.
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.
Hazchem Code	2X
Decomposition Temperature	Information is not available.
Other Information	Location Certificate: Not applicable Hazardous Atmosphere Zone: Not applicable Number of Fire Extinguishers: Not applicable

Section 6 - Accidental Release Measures

Spills and Disposal	Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with sand, soil or absorbent granules. If spill does enter waterways contact the local authority. Collect in an appropriate sealable container for disposal in an approved landfill.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.

Infosafe No™ 3NULC	Issue Date : February 2024	ISSUED by NUFARMNZ
Product Name NANDO®		

Environmental Precautions Prevent from entering drains, waterways or sewers.

Section 7 - Handling and Storage

Precautions for Safe Handling	Do not handle until all safety precautions have been read and understood. The person mixing or applying NANDO must be a 'Qualified Contractor' or 'Qualified Loader'. For more information refer to the Hazardous Substances Property Controls Notice 2017. It is the duty of the PCBU that a person who uses, handles, manufactures or stores a hazardous substance (including hazardous waste) is provided information, instruction and training in accordance with Regulation 4.5 of the Health and Safety at work (Hazardous Substances) Regulations 2017. Avoid skin and eye contact and inhalation of spray mist. CERTIFIED HANDLER: Is not required. TRACKING: Is not required RECORD KEEPING: Records of use as described in NZS 8409 Management of Agrichemicals must be kept if 3L or more is applied within 24 hours. 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. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Stores containing 100L of NANDO require secondary containment and are subject to signage, and more than 100L 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.

Section 8 - Exposure Controls and Personal Protection

Occupational Exposure Limits (OEL)	No exposure limits (WES, TEL or EEL's) have been specifically assigned for this product.
Appropriate Engineering Controls	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal Protective Equipment	When opening the container, preparing spray and using the prepared spray wear safety goggles, waterproof gloves, cotton overalls buttoned to the neck and wrist, boots, and a NIOSH approved half face mask with organic vapour cartridge + dust/mist prefilter.
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.

Section 9 - Physical and Chemical Properties

Form	Liquid
Appearance	yellow - orange opaque liquid
Odour	Information is not available.
Decomposition Temperature	Information is not available.
Boiling Point	100 °C (aqueous suspension)
Solubility in Water	Disperses in water.
Specific Gravity	1.26 @ 20°C
pH	7-9
Vapour Pressure	Information is not available.

Infosafe No™ 3NULC	Issue Date : February 2024	ISSUED by NUFARMNZ
--------------------	----------------------------	--------------------

Product Name **NANDO®**

Vapour Density (Air=1)	Information is not available.
Odour Threshold	Information is not available.
Partition Coefficient: n-octanol/water	Information is not available.
Flash Point	Information is not available.
Flammability	Non flammable.
Auto-ignition Temperature	Information is not available.
Flammable Limits - Lower	Information is not available.
Flammable Limits - Upper	Information is not available.
Initial Boiling Point and Boiling Range	Information is not available.
Kinematic Viscosity	Information is not available.
Particle Characteristics	Information is not available.
Relative Density	Information is not available.
Melting/Freezing Point	Information is not available.
Other Information	(SC) Suspension Concentrate

Section 10 - Stability and Reactivity

Chemical Stability	Stable under normal conditions of handling and storage.
Hazardous Polymerization	Hazardous polymerisation will not occur.

Section 11 - Toxicological Information

Toxicology Information	No specific toxicological data is available for this product. Data below is for constituents.
Acute Toxicity - Oral	LD50 (rat) >5,000 mg/kg for fluazinam
Acute Toxicity - Inhalation	LC50 (rat) 0.463 mg/L for fluazinam
Acute Toxicity - Dermal	LD50 (rat) >2,000 mg/kg for fluazinam
Ingestion	Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. However, swallowing of large amounts may cause injury.
Inhalation	May cause irritation to respiratory tract.
Skin	May irritate the skin.
Corrosion/Irritation	
Serious Eye Damage/Irritation	May irritate the eyes.
Skin Sensitisation	Nando is not considered a skin sensitizer, however, fluazinam technical produces a positive result to skin sensitization in guinea pigs.
Germ Cell Mutagenicity	Information is not available.
Carcinogenicity	Information is not available.
Reproductive Toxicity	Suspected reproductive/developmental toxicant.

Infosafe No™ 3NULC	Issue Date : February 2024	ISSUED by NUFARMNZ
--------------------	----------------------------	--------------------

Product Name **NANDO®**

STOT - Repeated Exposure	May cause damage to the liver from prolonged or repeated exposure.
Aspiration Hazard	Information is not available.
Subchronic/Chronic Toxicity	Target organ toxicant - liver (fluazinam)
Other Information	The Australian Acceptable Daily Intake (ADI) for fluazinam for a human is 0.004 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.4 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: Aust Govt Dept. of APVMA, 'ADI List', Edition 4/2023).

Section 12 - Ecological Information

Persistence and Degradability	Fluazinam is not rapidly degradable. DT50 field soil = 26.5d for fluazinam.
Mobility	Information is not available.
Bioaccumulative Potential	Not bioaccumulative.
Basis for Assessment	Ecotoxicological data have not been determined specifically for this product. Data below is for the active ingredient unless otherwise stated.
Acute Toxicity - Fish	LC50 (96h) for rainbow trout is 0.036mg/l for fluazinam
Acute Toxicity - Daphnia	EC50 (48h) for daphnia magna is 0.18mg/L for fluazinam
Acute Toxicity - Algae	EC50 (96h) for Selenastrum capricornutum is 0.16mg/L for fluazinam
Acute Toxicity - Other Organisms	LD50 for bobwhite quail is 1,782mg/kg for fluazinam LD50 bee (oral) is >100µg/bee, (contact) is >200µg/bee for fluazinam LC50 (28d) worm is >1,000mg/kg for fluazinam

Section 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.

Section 14 - Transport Information

Transport Information	It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs.
UN Number	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. - (fluazinam)
Hazard Class	9
Hazchem Code	2X
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 10L of NANDO 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.

Infosafe No™ 3NULC	Issue Date : February 2024	ISSUED by NUFARMNZ
--------------------	----------------------------	--------------------

Product Name **NANDO®**

Section 15 - Regulatory Information

National and or International Regulatory Information	Registered pursuant to the ACVM Act 1997, No. P7980 See www.foodsafety.govt.nz for registration conditions Approved pursuant to the HSNO Act 1996, Approval Code HSR007763 See www.epa.govt.nz for approval controls.
Packaging and Labelling	KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Section 16 - Any Other Relevant Information

Date of preparation or last revision of SDS March 2019.**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** 5 yearly review carried out. Various changes and updates made to document. Various changes and updates made to the document to comply with GHS7.
...End Of MSDS...

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Chemical Safety International Pty Ltd. The compilation of MSDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Chemical Safety International Pty Ltd.