SAFETY DATA SHEET

LANCER® 970 INSECTICIDE

Infosafe No.: 3NUM9
ISSUED Date : 20/01/2023
ISSUED by: NUFARM AUSTRALIA LIMITED.

Section 1 - Identification

Product Identifier
LANCER® 970 INSECTICIDE

Product Code
1064

Product Type
Group 1B Insecticide

Company Name
NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)

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Recommended use of the chemical and restrictions on use
For the control of certain insect pests on bananas, crucifers, macadamias, ornamentals, potatoes, tobacco and tomatoes as specified in the Directions for Use table on the label.

Other Information
This Safety Data Sheet describes the properties of the concentrated product. The physical properties and the assessments may not apply to the properties of the product once it has been diluted for application

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Acute toxicity: Category 4 - Oral

Signal Word (s)
WARNING

Hazard Statement (s)
H302 Harmful if swallowed.

Pictogram (s)
Exclamation mark

Precautionary Statement–Prevention
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

Precautionary Statement–Response
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.

Precautionary Statement–Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Acephate	30560-19-1	970 g/kg
Ingredients determined not to be hazardous		Balance

Section 4 - First Aid Measures

Inhalation
If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion
Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin
Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities
Eyewash and normal washroom facilities.

Advice to Doctor
Treat symptomatically.
An anticholinesterase compound.
Artificial respiration should be started at the first sign of respiratory failure. Cautious administration of fluids is advised, as well as general supportive and symptomatic pharmacological treatment and absolute rest. As early as possible, administer 2 mg of atropine sulfate i.v. and 1000-2000 mg of pralidoxime chloride or 250 mg of obidoxime chloride (adult dose) i.v. to patients suffering from severe respiratory difficulties, convulsions, and unconsciousness. Repeated doses of 2 mg of atropine sulfate should be given, as required, based on the respiration, blood pressure, pulse frequency, salivation, and convulsion conditions. The dose and the frequency of atropine varies with each patient, but the patient should remain fully atropinised (signs include dilated pupils, dry mouth, skin flushing). Diazepam should be given in all but the mildest cases in doses of 10 mg, s.c. or i.v., which may be repeated as required. For children, the doses are 0.04-0.08 mg of atropine/kg body weight, 250 mg of pralidoxime chloride per child, or 4-8 mg of obidoxime chloride/kg body weight. Morphine, barbiturates, phenothiazine derivatives, tranquillizers, and all kinds of central stimulants are contraindicated.

Other Information
For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Section 5 - Firefighting Measures

Suitable Extinguishing Media
Water, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including phosphorous, nitrogen and possibly sulphur.

Specific hazards arising from the chemical
This product is non combustible.

Decomposition Temperature
Not available

Precautions in connection with Fire
Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

Section 6 - Accidental Release Measures

Emergency Procedures
Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for Safe Handling
Avoid inhalation of dust, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values
No exposure standards have been established for the mixture. However, over-exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.

Biological Monitoring
No biological limits allocated.

Control Banding
Not available

Engineering Controls
This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.
Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye and Face Protection
Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.
Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection
Wear gloves of impervious material such as nitrile or elbow-length PVC gloves. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.
Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Thermal Hazards
No further relevant information available.

Body Protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Requirements Concerning Special Training
Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Solid	**Appearance**	White granule
Colour	White	**Odour**	Unpleasant sulfurous odour
Melting Point	Not available	**Boiling Point**	Not available
Decomposition Temperature	Not available	**Solubility in Water**	Soluble
Specific Gravity	1.35	**pH**	4 - 5 in a 5% solution
Vapour Pressure	0.226 mPa @ 25°C	**Relative Vapour Density (Air=1)**	Not available
Evaporation Rate	Not available	**Odour Threshold**	Not available
Viscosity	Not available	**Volatile Component**	Not available
Partition Coefficient: n-octanol/water (log value)	Not available	**Density**	Not available
Flash Point	Not available	**Flammability**	Non-combustible
Auto-Ignition Temperature	Not available	**Flammable Limits - Lower**	Not available
Flammable Limits - Upper	Not available	**Explosion Properties**	Not available
Oxidising Properties	Not available	**Particle Characteristics**	Not available

Section 10 - Stability and Reactivity

Reactivity
Reacts with incompatible materials.

Chemical Stability
Stable under normal conditions of storage and handling.

Possibility of hazardous reactions
Contact with alkaline materials, including hypochlorite bleaches may produce poisonous gases.

Conditions to Avoid
Extremes of temperature and direct sunlight.

Incompatible Materials
Avoid contact with alkaline materials.

Hazardous Decomposition Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including phosphorous, nitrogen and possibly sulphur.

Hazardous Polymerization
Hazardous polymerization is not possible.

Section 11 - Toxicological Information

Toxicology Information
Toxicity data for material given below.

Acute Toxicity - Oral
LD50 (rat, male): 688 mg/kg
Acephate is extensively metabolised to methamidaphos in insects and plant.
Conversion to methamidaphos in mammals is limited.

Acute Toxicity - Dermal
LD50 (rabbit): >2000 mg/kg

Acute Toxicity - Inhalation
LC50 (rat): >15 mg/l/4h

Ingestion
Harmful if swallowed. Ingestion of this product may cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation
Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

Skin
May be irritating to skin. The symptoms may include redness, itching and swelling.

Eye
May be irritating to eyes. The symptoms may include redness, itching and tearing.

Respiratory Sensitisation
Not expected to be a respiratory sensitiser.

Skin Sensitisation
Not expected to be a skin sensitiser.

Germ Cell Mutagenicity
Not considered to be a mutagenic hazard.

Carcinogenicity
Not considered to be a carcinogenic hazard.
The US EPA has classified acephate as Group C (possible human carcinogen, limited carcinogenicity in animals in the absence of human data) based on an increased incidence of liver carcinoma and adenoma in female mice (although only at very high doses in the female) and liver tumours in female rats and mice, at doses of 10 mg/kg/day in a long term study.

Reproductive Toxicity
Not considered to be toxic to reproduction.

STOT - Single Exposure
Not expected to cause toxicity to a specific target organ.

STOT - Repeated Exposure
Not expected to cause toxicity to a specific target organ.

Aspiration Hazard
Not expected to be an aspiration hazard.

Chronic Effects
Regular exposure may result in lowering of cholinesterase activity which will recover within a few days after exposure ceases.
Chronic exposure can cause damage to the liver.

Other Information

The Australian Acceptable Daily Intake (ADI) for acephate for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.25 mg/kg/day, the level determined to show no effects during long term exposure for themost sensitive indicators and the most sensitive species.
Ref: Australian Pesticides and Veterinary Medicines Authority (APVMA) December 2022.

Section 12 - Ecological Information

Ecotoxicity
No ecological data available for this material. The available ecological data for the ingredients is given below:

Persistence and degradability
Half life in soil is typically 3 days.

Mobility
Not available

Bioaccumulative Potential
Risk of bioaccumulation in aquatic species is low.

Other Adverse Effects
Not available

Other Precautions
Do not spray on vegetation where honeybees are foraging.
Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

Environmental Protection
Prevent this material entering waterways, drains and sewers.

Acute Toxicity - Fish
Acephate
LC50 (rainbow trout): 110 mg/l/96h

Acute Toxicity - Daphnia
Acephate
EC50: 67.2 mg/l.

Acute Toxicity - Other Organisms
Acephate
LD50 (bee): 1.2 µg/bee
LC50 (mallard ducks): 350 mg/l

Should not be applied while bees are actively foraging.

Hazardous to the Ozone Layer
This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.
To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

Product Disposal
On site disposal of the concentrated product is not acceptable.
Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).

Container Disposal and Methods
Add rinsings to spray tank.
Do not use this container for any other purpose.
If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.
Empty containers and product should not be burnt.
Puncture and bury empty containers in a local authority landfill.
Single rinse before disposal.

Section 14 - Transport Information

Transport Information
Road and Rail Transport (ADG Code):
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

Marine Transport (IMO/IMDG):
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN Number
None Allocated

Proper Shipping Name
None Allocated

Transport Hazard Class
None Allocated

Special Precautions for User
Not available

IMDG Marine pollutant
No

Transport in Bulk
Not available

Section 15 - Regulatory Information

Regulatory Information
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.
Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Australia: WHS regulations (2011) - Schedule 11: classification not listed.

Poisons Schedule
S6

Montreal Protocol
Not listed

Stockholm Convention
Not listed

Rotterdam Convention
Not listed

International Convention for the Prevention of Pollution from Ships (MARPOL)
Not available

Agricultural and Veterinary Chemicals Act 1994
APVMA product number: 59305.
This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).

Basel Convention
Not listed

Section 16 - Any Other Relevant Information

Date of Preparation
SDS Revised: January 2023
Supersedes: November 2020

Version Number
2.0

Literature References
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
Standard for the Uniform Scheduling of Medicines and Poisons.
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Code of Practice for Supply Diversion into Illicit Drug Manufacture.
National Code of Practice for Chemicals of Security Concern.
Agricultural Compounds and Veterinary Chemicals Act.
International Agency for Research on Cancer (IARC) Monographs.
Montreal Protocol on Substances that Deplete the Ozone Layer.
Stockholm Convention on Persistent Organic Pollutants (POPs).
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.
International Air Transport Association (IATA) Dangerous Goods Regulations.
International Maritime Dangerous Goods (IMDG) Code.
Workplace exposure standards for airborne contaminants.
Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).
Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).
Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

Contact Person/Point
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After hours: Shift supervisor : Phone 1800 033 498

END OF SDS