

## NUFARM CALIBRE MITICIDE

Infosafe No.: 3NUYJ  
ISSUED Date : 27/03/2023  
ISSUED by: NUFARM AUSTRALIA LIMITED.

### Section 1 - Identification

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**Product Identifier**

NUFARM CALIBRE MITICIDE

**Product Code**

1014

**Product Type**

Group 10A Insecticide

**Company Name**

NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)

**Address**

103-105 Pipe Road Laverton North  
Victoria 3026 AUSTRALIA

**Telephone/Fax Number**

Tel: +61 3 9282-1000

Fax: +61 3 9282-1001

**Emergency Phone Number**

1800 033 498 (24hr Australia)

**Emergency Contact Name**

www.nufarm.com.au

**E-mail Address**

SDSANZ@nufarm.com

**Recommended use of the chemical and restrictions on use**

For the control of twospotted mite (*Tetranychus urticae*) and European red mite (*Panonychus ulmi*) on apples, pears, stone fruit and ornamentals and for control of twospotted mite on strawberries as per the Directions for Use table on the label.

### Section 2 - Hazard(s) Identification

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**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.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Flammable liquids: Category 3

Acute toxicity: Category 4 - Dermal

Acute toxicity: Category 4 - Inhalation

Skin corrosion/irritation: Category 2

Eye damage/irritation: Category 1

Specific target organ toxicity (single exposure): Category 3 (Respiratory tract irritation)

Aspiration hazard: Category 1

Hazardous to the Aquatic Environment - Acute Hazard: Category 2

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2

**Signal Word (s)**

DANGER

**Hazard Statement (s)**

H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.  
H411 Toxic to aquatic life with long lasting effects.

**Pictogram (s)**

Flame, Exclamation mark, Corrosion, Health hazard, Environment



**Precautionary Statement–Prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P240 Ground and bond container and receiving equipment.  
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.  
P242 Use non-sparking tools.  
P243 Take action to prevent static discharges.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**Precautionary Statement–Response**

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor  
P331 Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P370+P378 In case of fire: Use water fog, foam, carbon dioxide or dry chemical to extinguish.  
P391 Collect spillage.

**Precautionary Statement–Storage**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.

**Precautionary Statement–Disposal**

P501 Dispose of contents/container to an approved waste disposal plant.

**Other Information**

This product contains an Ototoxic substance.  
Combination with noise exposure, even at safe levels, could still cause auditory injuries and hearing loss.

## Section 3 - Composition and Information on Ingredients

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### Ingredients

Name	CAS	Proportion
Xylene	1330-20-7	753 g/L
hexythiazox (ISO)	78587-05-0	100 g/L
Emulsifiers		0-10 %
Ingredients determined not to be hazardous		Balance

## Section 4 - First Aid Measures

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### Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

### Ingestion

Do NOT induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

### Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

### Eye

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

### First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

### Advice to Doctor

Treat symptomatically.

### 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

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### Suitable Extinguishing Media

Water fog, foam, carbon dioxide or dry chemical.

### Unsuitable Extinguishing Media

Do not use water jet.

### Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including sulfur compounds, chlorine compounds, carbon monoxide, carbon dioxide and oxides of nitrogen.

### Specific hazards arising from the chemical

Flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

### Special Protective Equipment and Precautions for Firefighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

### Hazchem Code

•3Y

### Decomposition Temperature

Not available

## Section 6 - Accidental Release Measures

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### Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable 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

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### Precautions for Safe Handling

Always read the label and any attached leaflet before use. Avoid contact with skin and eyes. Wear overalls, impervious gloves and safety glasses. Use in designated areas with local exhaust ventilation, away from sparks, flames and other ignition sources. Use approved flammable liquid storage containers in the work area. Prevent release of vapours and mists into workplace air. Keep containers tightly closed. Take precautionary measures against static discharges. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

### Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing and incompatible materials such as oxidising agents. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

## Section 8 - Exposure Controls and Personal Protection

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### Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Xylene

TWA: 80 ppm, 350 mg/m<sup>3</sup>

STEL: 150 ppm, 655 mg/m<sup>3</sup>

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Source: Safe Work Australia

### Biological Monitoring

Name: Xylenes

Determinant: Methylhippuric acids

Specimen: In urine

Value: 1.5 g/g creatinine

Sampling time: End of shift

Source: American Conference of Industrial Hygienists (ACGIH).

### Control Banding

Not available

### Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements. Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

### Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist 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 full face shield should be used. 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 PVC. 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.

## Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Liquid	Appearance	Clear colourless to amber liquid.
Colour	Amber	Odour	Mild chemical odour
Melting Point	Not available	Boiling Point	Not available
Decomposition Temperature	Not available	Solubility in Water	Forms an emulsion
Specific Gravity	0.904	pH	Not available
Vapour Pressure	0.0034 mPa @ 25°C for hexythiazox	Relative Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Volatile Component	83%
Partition Coefficient: n-octanol/water (log value)	Kow Log P is 2.53 for hexythiazox	Flash Point	24°C
Flammability	Flammable liquid	Auto-Ignition Temperature	465°C for xylene
Flammable Limits - Lower	1% by volume (for xylene)	Flammable Limits - Upper	7.5% by volume (for xylene)
Explosion Properties	Not available	Oxidising Properties	Not available
Particle Characteristics	Not available		

## Section 10 - Stability and Reactivity

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### Reactivity

Reacts with incompatible materials.

### Chemical Stability

Stable under normal conditions of storage and handling.

### Possibility of hazardous reactions

Reacts with incompatible materials.

### Conditions to Avoid

Heat, open flames and other sources of ignition.

### Incompatible Materials

Strong oxidising agents.

### Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including sulfur compounds, chlorine compounds, carbon monoxide, carbon dioxide and oxides of nitrogen.

### Hazardous Polymerization

Will not occur.

## Section 11 - Toxicological Information

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### Toxicology Information

No toxicity data available for this material. The available acute toxicity data for the ingredient/s is/are given below.

#### Acute Toxicity - Oral

Hexythiazox

LD50 (rat): >5000 mg/kg

#### Acute Toxicity - Dermal

Hexythiazox

LD50 (rat): >5000 mg/kg

#### Acute Toxicity - Inhalation

Hexythiazox

LC50 (rat): >2 mg/l/4h

#### Ingestion

May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

#### Inhalation

Harmful if inhaled. Inhalation of product vapours can cause irritation of the nose, throat and respiratory system.

May cause respiratory irritation. Inhalation of product vapours can cause irritation of the nose, throat and respiratory system, may also cause headaches and dizziness, and may have other central nervous system effects.

#### Skin

Harmful in contact with skin. Product can be absorbed through skin with resultant harmful systemic effects.

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

#### Eye

Causes eye damage. Eye contact will cause stinging, blurring, tearing, severe pain and possible burns, necrosis, permanent damage and blindness.

#### 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.

Xylene is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

**Reproductive Toxicity**

Not considered to be toxic to reproduction.

**STOT - Single Exposure**

May cause respiratory irritation.

**STOT - Repeated Exposure**

Not expected to cause toxicity to a specific target organ.

**Aspiration Hazard**

May be fatal if swallowed and enters airways.

**Other Information**

The Australian Acceptable Daily Intake (ADI) for hexythiazox for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 3 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: Australian Pesticides and Veterinary Medicines Authority (APVMA) December 2022.)

This product contains an Ototoxic substance.

Combination with noise exposure, even at safe levels, could still cause auditory injuries and hearing loss.

## Section 12 - Ecological Information

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**Ecotoxicity**

Toxic to aquatic life with long lasting effects.

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 8 days.

**Mobility**

Not available

**Bioaccumulative Potential**

Not available

**Other Adverse Effects**

Not available

**Environmental Protection**

Do not discharge this material into waterways, drains and sewers.

**Acute Toxicity - Fish**

Hexythiazox

LC50 (rainbow trout): >300 mg/l/96h

LC50 (bluegill sunfish): 11.6 mg/l/96h

**Acute Toxicity - Daphnia**

Hexythiazox

LC50: 0.24 mg/l/48h.

**Acute Toxicity - Other Organisms**

Hexythiazox

Bees: Not toxic to bees. LD50 >200 µg/bee.

LD50 (mallard ducks): >2510 mg/kg

**Hazardous to the Ozone Layer**

This product is not expected to deplete the ozone layer.

## Section 13 - Disposal Considerations

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### Disposal Considerations

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Advise flammable nature. Empty containers may contain flammable residues. Do not cut, puncture or weld on or near containers. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. 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

Do not use this container for any other purpose.

Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations.

drumMUSTER is the national program for the collection and recycling of empty, cleaned, non returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program.

If not recycling, puncture or shred and bury containers in local authority landfill.

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.

If recycling, replace cap and return clean containers to recycler or designated collection point.

## Section 14 - Transport Information

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### Transport Information

Road and Rail Transport (ADG Code):

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

Class 1: Explosives

Division 2.1: Flammable gases (Division 2.1 and Class 3 are incompatible in transport if both are in tanks or other receptacles with a capacity individually exceeding 500 L)

Division 2.3: Toxic gases

Division 4.2: Spontaneously combustible substances

Division 5.1: Oxidising substances

Division 5.2: Organic peroxides

Class 6: Toxic or Infectious Substances (where the flammable liquid is nitromethane)

Class 7: Radioactive materials unless specifically exempted

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 3

UN No: 1993

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S (Contains Xylene) (Hexythiazox) MARINE POLLUTANT

Packaging Group: III

EMS No.: F-E, S-E

Special Provision: 223, 274, 955

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 1993

Proper Shipping Name: Flammable liquid, n.o.s. (Contains Xylene)  
Class: 3  
Packaging Group: III  
Label: Flammable Liquid  
Packaging Instructions (passenger & cargo): 355  
Packaging Instructions (cargo only): 366  
Special Provision: A3

**UN Number**

1993

**Proper Shipping Name**

FLAMMABLE LIQUID, N.O.S.(contains Xylene)

**Transport Hazard Class**

3

**Packing Group**

III

**Hazchem Code**

•3Y

**IERG Number**

14

**Special Precautions for User**

Not available

**IMDG Marine pollutant**

Yes

**Transport in Bulk**

Not available

## Section 15 - Regulatory Information

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**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).  
WHS Schedule 11: item 7 - Flammable Liquid category 3.

**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: 58856.

This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).

**Basel Convention**

Not listed

## Section 16 - Any Other Relevant Information

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**Date of Preparation**

SDS Amended: January 2024, Product Identifier updated.

SDS Reviewed: March 2023

Supersedes: January 2022

#### **Version Number**

2.1

#### **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**

Normal hours: SDS coordinator : Phone +61 3 9282 1000

After hours: Shift supervisor : Phone 1800 033 498

## **END OF SDS**

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