

Infosafe No™ 3NUYJ	Issue Date : June 2017	ISSUED by NUFARM
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 Product Name **CALIBRE® 100 EC Miticide**

Classified as hazardous

1. Identification

GHS Product Identifier	CALIBRE® 100 EC 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)
Recommended use of the chemical and restrictions on use	For the control of twospotted mite (<i>Tetranychus urticae</i>) and European red mite (<i>Panonychus ulmi</i>) 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.
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.

2. Hazard Identification

GHS classification of the substance/mixture	FL3 Flammable Liquids: Category 3 TR1 Toxic to Reproduction: Category 1 DT4 Acute Toxicity - Dermal: Category 4 IT 4 Acute Toxicity - Inhalation: Category 4 SC-2 Skin Corrosion/Irritation: Category 2 AC1 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1
Signal Word (s)	DANGER
Hazard Statement (s)	H226 Flammable liquid and vapour. H360 May damage fertility or the unborn child. H312 Harmful in contact with skin. H332 Harmful if inhaled. H318 Causes serious eye damage. H315 Causes skin irritation.
General Precautionary Statement (s)	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use.
Pictogram (s)	Flame, Health hazard, Exclamation mark, Corrosion, Environment, The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.



Precautionary statement – Prevention	P210 Keep away from open flames/hot surfaces. - No smoking. P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire. P280 Wear protective gloves, clothing, eye and face protection. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing vapours and spray.
Precautionary statement – Response	P308+P313 IF exposed or concerned: Get medical advice/attention. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P370+P378 In case of fire: Use water fog, foam, carbon dioxide or dry chemical for extinction. P363 Wash contaminated clothing before reuse. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell.

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Other Information

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 or doctor/physician.
 Poisons Schedule S6

3. Composition/information on ingredients

Chemical Liquid

Characterization

Ingredients	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Hexythiazox	78587-05-0	100 g/L
	Xylene	1330-20-7	753 g/L
	Emulsifiers		0-10 %

4. First-aid measures

Inhalation	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
Ingestion	Rinse mouth and then drink plenty of water. If swallowed do NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.
Skin	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
Eye contact	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice.
First Aid Facilities	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor	Treat symptomatically. If vomiting occurs, solvent present may cause pulmonary pneumonitis.

5. Fire-fighting measures

Suitable extinguishing media	Water fog, foam, carbon dioxide or dry chemical.
Hazards from Combustion Products	If involved in a fire, the dehydrated components may emit oxides of carbon, oxides of nitrogen, sulfur compounds and chlorine compounds.
Special Protective Equipment for fire fighters	Breathable air apparatus should be worn when fighting a fire in which this product is involved.
Specific hazards arising from the chemical	Flammable liquid. Avoid all ignition sources. Do not smoke.
Hazchem Code	2W
Other Information	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. Accidental release measures

Spills & Disposal	Shut off all possible sources of ignition. Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal.
Personal Protection	For appropriate personal protective equipment (PPE), refer Section 8.

7. Handling and storage

Precautions for Safe Handling	Do NOT contaminate dams, rivers or streams, or any other water bodies with chemical or used containers.
Conditions for safe storage, including any incompatibilities	Store in the closed, original container in a dry, cool well ventilated area out of direct sunlight. Store in an area suitable for flammables.

Infosafe No™ 3NUYJ	Issue Date : June 2017	ISSUED by NUFARM
--------------------	------------------------	------------------

Product Name **CALIBRE® 100 EC Miticide**

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Other Information Always read the label and any attached leaflet before use.

8. Exposure controls/personal protection

Occupational exposure limit values Safe Work Australia has set the following exposure standard for xylenes : TLV (TWA) 350 mg/m³, STEL 655 mg/m³.

Appropriate engineering controls Provide ventilation as required to maintain airborne concentration levels below the exposure standard.

Personal Protective Equipment It is good practice to wear suitable personal protective equipment (PPE).
When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles.

Hygiene Measures After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.
After each day's use, wash contaminated clothing and safety equipment.

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.

9. Physical and chemical properties

Form Liquid

Appearance Clear colourless to amber liquid.

Odour Mild chemical odour

Solubility in Water Forms an emulsion in water.

Specific Gravity 0.904

Vapour Pressure 0.0034 mPa @ 25°C for hexythiazox

Volatile Component 83%

Partition Coefficient: n-octanol/water Kow Log P is 2.53 for hexythiazox

Flash Point 24°C

Flammability Flammable.

Auto-Ignition Temperature 465°C for xylene

Flammable Limits - Lower 1% by volume (for xylene)

Flammable Limits - Upper 7.5% by volume (for xylene)

10. Stability and reactivity

Chemical Stability Stable under normal conditions.

Possibility of hazardous reactions Keep away from strong oxidising agents.

Hazardous Polymerization Hazardous polymerisation is not possible.

11. Toxicological Information

Toxicology Information No harmful effects are expected if the precautions on the label and this MSDS are followed.

Acute Toxicity - Oral LD50 (rat) >5000 mg/kg for hexythiazox

Acute Toxicity - Dermal LD50 (rat) >5000 mg/kg for hexythiazox

Acute Toxicity - Inhalation LC50 (rat) (4hr) >2 mg/l for hexythiazox

Ingestion Possible symptoms of exposure include: symptoms of central nervous system depression as described under inhalation.

Inhalation High vapour concentrations of the solvent while handling the concentrate are

Infosafe No™ 3NUYJ	Issue Date : June 2017	ISSUED by NUFARM
--------------------	------------------------	------------------

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Skin	irritating to the eyes and the respiratory tract, may cause headaches and dizziness, and may have other central nervous system effects. Will irritate the skin.
Eye	Will irritate the eyes.
Skin Sensitisation	Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.
Reproductive Toxicity	Product is not a skin sensitiser.
Serious eye damage/irritation	Data indicates no teratogenic effects.
Mutagenicity	The product is an eye irritant.
Skin corrosion/irritation	Data indicates no mutagenic effects.
Other Information	The product is a skin irritant.
	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: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', March 2016).

12. Ecological information

Persistence and degradability	Half life in soil is typically 8 days.
Other Precautions	Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environmental Protection	Marine pollutant.
Acute Toxicity - Fish	The following is data for the active ingredient, hexythiazox. LC50 (96hr) for rainbow trout is >300 mg/l. LC50 (96hr) for bluegill sunfish is 11.6 mg/l.
Acute Toxicity - Daphnia	LC50 (48hr) for daphnia is 0.24 mg/l.
Acute Toxicity - Other Organisms	The following data is for the active ingredient, hexythiazox. LD50 for mallard ducks is >2510 mg/kg Bees: Not toxic to bees. LD50 >200 µg/bee.

13. Disposal considerations

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

14. Transport information

Infosafe No™ 3NUYJ	Issue Date : June 2017	ISSUED by NUFARM
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U.N. Number	1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. - (contains Xylene)
Transport hazard class(es)	3
Hazchem Code	2W
Packaging Method	3.8.3RT1
Packing Group	III
Storage and Transport	Considered dangerous for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.
EPG Number	3A1
IERG Number	14
IMO Marine Pollutant	Marine Pollutant

15. Regulatory information

Regulatory Information	WHS Schedule 11: item 8 - Flammable Liquid category 3.
Poisons Schedule	S6
Packaging & Labelling	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Other Information	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 58856.

16. Other Information

Date of preparation or last revision of SDS	14/06/2017
Contact Person/Point	Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000 After Hours: Shift Supervisor Phone: 1800 033 498
Revisions Highlighted	The SDS was reviewed. Minor changes were made to the information and product has been rebranded.
Other Information	® Registered trademark of BASF. ...End Of MSDS...

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