Safety Data Sheet

Infosafe No™ 3NU2C Issue Date : June 2016 ISSUED by NUFARM

Product Name FENITROTHION 1000 Insecticide

1. Identification

GHS Product Identifier
Product Code 1200
Product Type Group 1B Insecticide
Company Name NUFARM AUSTRALIA LIMITED. (ABN 80 004 377 780)
Address 103-105 Pipe Road Laverton North
Victoria 3026 Australia
Telephone/Fax Tel: +61 3 9282-1000
Number 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 various insects pests crops and pastures as per the Directions of 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
OT4 Acute Toxicity - Oral: Category 4
DT4 Acute Toxicity - Dermal: Category 4
ED2A Eye Damage/Irritation: Category 2A
SC-2 Skin Corrosion/Irritation: Category 2
SE-2 STOT Single Exposure Category 2
SE-3RES STOT Single Exposure Category 3 (respiratory tract irritation)
FL2 Flammable Liquids: Category 2

Signal Word(s) WARNING

Hazard Statement(s)
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H318 Causes serious eye damage.
H315 Causes skin irritation.
H371 May cause damage to organs.
H336 May cause drowsiness or dizziness.
H226 Flammable liquid and vapour.

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)
Exclamation mark, Flame, Health hazard,
The below pictograms are GHS Hazard symbols for workplace use only. See SECTION 14 for Dangerous Goods information.

Precautionary statement – Prevention
P264 Wash hands and exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves, clothing, eye and face protection.
P260 Do not breathe vapours or spray.
P271 Use only outdoors or in a well-ventilated area.
P210 Keep away from heat. – No smoking.
P233 Keep container tightly closed.

Precautionary statement – Response
P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330 Rinse mouth.
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.
FENITROTHION 1000 Insecticide

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical Characterization</th>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredients</td>
<td>Fenitrothion</td>
<td>122-14-5</td>
<td>1000 g/L</td>
</tr>
<tr>
<td></td>
<td>Mixed proprietary surfactants</td>
<td>Mixture</td>
<td>100-200 g/L</td>
</tr>
<tr>
<td></td>
<td>Xylene</td>
<td>1330-20-7</td>
<td>50-100 g/L</td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation
- Remove patient to fresh air. Obtain medical advice.

Ingestion
- 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
- Remove contaminated clothing and launder before re-use.
- Wash affected areas thoroughly with soap and water.
- If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes.
- Seek medical advice if irritation develops or persists.

Eye contact
- If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.

First Aid Facilities
- Vomiting may cause pulmonary aspiration. The stomach should be emptied as soon as possible by careful gastric lavage (using a cuffed endotracheal tube already in place). 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.

Advice to Doctor

5. Fire-fighting measures

Suitable extinguishing media
- Water, foam, carbon dioxide or dry chemical.

Hazards from Combustion Products
- If involved in a major fire, could evolve oxides of sulphur or phosphorous.

Special Protective Equipment for fire fighters
- Breathable air apparatus may have to be worn if material is involved in fires in confined spaces.
6. Accidental release measures

**Spills & Disposal**
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.
Dispose of at a landfill in accordance with local regulations.
Dilute caustic soda or soda ash or lime for final clean up ONLY.
For appropriate personal protective equipment (PPE), refer Section 8.

**Clean-up Methods - Large Spillages**
Place damaged containers in recovery bins (if available) and return to manufacturer.

**Environmental Precautions**
Prevent from entering drains, waterways or sewers.

7. Handling and storage

**Handling large quantities associated with industrial processing of this product may require additional controls including use of explosion proof electrical equipment, use of non-sparking tools or precautions against static discharge.**

**Precautions for Safe Handling**
Store in the closed, original container in a cool, well ventilated area.
Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.
Do not store for prolonged periods in direct sunlight.

8. Exposure controls/personal protection

**Occupational exposure limit values**
No biological exposure limit allocated.
No exposure standards have been set for this product. Safe Work Australia has set the following exposure standard for Xylene: TLV (TWA) 350 mg/m³, STEL 655 mg/m³.

**Appropriate engineering controls**
Handle in well ventilated areas, generally natural ventilation is adequate.
The vapour concentration of the solvent can exceed the statutory limits for workplaces. The flashpoint of the product is 34°C, therefore on hot days vapour can build up in confined spaces and may track some distance to an ignition source.

**Respiratory Protection**
If exposure to vapour or spray is expected, a half face respirator with cartridge type A is recommended.

**Personal Protective Equipment**
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 face shield or goggles.
When using in enclosed areas, wear goggles and half face piece respirator with combined dust and gas cartridge.

**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, amber liquid

**Odour**
Characteristic odour

**Melting Point**
<0°C

**Boiling Point**
138°C for solvent. Fenitrothion decomposes at >140°C

**Solubility in Water**
Disperses in water. Not soluble.
Safety Data Sheet

Product Name: FENITROTHION 1000 Insecticide

Specific Gravity: 1.24 @ 20°C
pH: 4 - 5 (1% in deionised water)
Vapour Pressure: 18mPa @ 20°C for fenitrothion
Vapour Density (Air=1): 3.2
Volatile Component: approx 10%
Flash Point: 34°C (c.c.)
Flammability: Flammable.
Auto-Ignition Temperature: ~480°C
Flammable Limits - Lower: 1.2
Flammable Limits - Upper: 7.1

10. Stability and reactivity
Chemical Stability: Stable under normal conditions.
Incompatible Materials: Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime.
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) 330 mg/kg for fenitrothion
Acute Toxicity - Dermal: LD50 (rat) 1077 mg/kg for fenitrothion
Acute Toxicity - Inhalation: LC50 (rat) (4hr) >2.21 mg/l
Ingestion: The concentrate is harmful if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury.
Inhalation: Not a likely route of exposure when handling the concentrate. When applying the product as a spray avoid breathing in spray mist.
Skin: Readily absorbed even through unbroken skin and considered the most dangerous toxic route. Negligible damage to skin is expected to occur especially when related to the hazard from absorption.
Eye: Will cause irritation, and absorption into the body system may also be significant.
Skin Sensitisation: Product is not a skin sensitiser.
Chronic Effects: Regular exposure may result in lowering of cholinesterase activity which will recover within a few days after exposure ceases.
Skin corrosion/irritation: Not a skin irritant.
Human Effects: Acute Over Exposure: It should be noted that fenitrothion is a compound of relatively low mammalian toxicity. Exposure to excessive amounts could cause intestinal cramps, tightness of the chest, blurred vision, headache, diarrhea, salivation and convulsions. Difficulty in breathing may be experienced, due either to congestion of the lungs or weakness of the respiratory muscles. In very severe cases of poisoning, muscle spasm, unconsciousness and convulsions may develop and death may result from respiratory failure.
Other Information: The Australian Acceptable Daily Intake (ADI) for fenitrothion for a human is 0.002 mg/kg/day, set for the public for daily, lifetime exposure. This is...
FENITROTHION 1000 Insecticide

12. Ecological information

Persistence and degradability
Average field half life of fenitrothion is 2.7 days.

Known Harmful Effects on the Environment
The product is a marine pollutant for sea transport. Fenitrothion is toxic to fish.

Environmental Protection
Spray drift can cause damage, read the label for more information.

Acute Toxicity - Fish
The following is data for the active ingredient, fenitrothion. LC50 (96hr) for rainbow trout is 1.3 mg/l.

Acute Toxicity - Daphnia
EC50 (48hr) for daphnia magna is 0.0086 mg/l.

Acute Toxicity - Other Organisms
Bees: Toxic to bees. LD50 0.16 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®). Do not use this container for any other purpose. Triple or preferably pressure rinse containers before disposal. Add rinsings to the spray tank.

Container Disposal
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. 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.

14. Transport information

U.N. Number
3017

UN proper shipping name
ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE - (Fenitrothion)

Transport hazard class(es)
6.1

Sub.Risk
3

Hazchem Code
2W

Packing Method
3.8.6

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
6C3

IERG Number
17

UN Number (Sea Transport)
3017

Print Date: 30/06/2016
FENITROTHION 1000 Insecticide

15. Regulatory information

Regulatory Information

WHS Schedule 11, item 7 (flammable liquid category 2)
S6

National and International Regulatory Information

There is a legislative requirement in most States in Australia for workers to be medically monitored when using organophosphates, by: 'estimation of red cell and plasma cholinesterase activity towards the end of the day on which organophosphates have been used'.
Ref: Control of Workplace Hazardous Substances, NOHSC:1005.

Packaging & Labelling

POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 32986.

16. Other Information

Date of preparation or last revision of SDS
Revised 30/06/2016.
This SDS replaces document dated May 2015.

Contact Person/Point of Revisions Highlighted
Normal Hours: Mrs Kathleen Marsh Phone: +61 3 9282 1000
After Hours: Shift Supervisor Phone: 1800 033 498
The SDS was reviewed. Various changes were made to the information.

...End Of MSDS...