

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 09.10.2015

Revision: 09.10.2015

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: 4 FARMERS FENAMIPHOS 400 NEMACIDE & INSECTICIDE

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Agricultural nemacide and insecticide

Details of Manufacturer or Importer:

4Farmers Pty Ltd
70 McDowell Street
Welshpool WA 6106

Phone Number: +61 8 9356 3446

Emergency telephone number: National Poison Information Centre: 13 11 26

2 . HAZARDS IDENTIFICATION

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

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



skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.



health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Flam. Liq. 4 H227 Combustible liquid.

Signal Word Danger

Hazard Statements

H227 Combustible liquid.

H300 Fatal if swallowed.

H311 Toxic in contact with skin.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

(Contd. on page 2)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 09.10.2015

Revision: 09.10.2015

Product Name: 4 FARMERS FENAMIPHOS 400 NEMACIDE & INSECTICIDE

(Contd. of page 1)

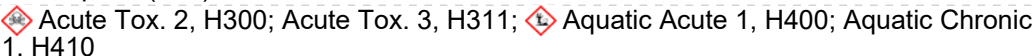


- P321 Specific treatment (see on this label).
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P391 Collect spillage.
 P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
 P405 Store locked up.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

22224-92-6	fenamiphos (ISO)  Acute Tox. 2, H300; Acute Tox. 3, H311;  Aquatic Acute 1, H400; Aquatic Chronic 1, H410	40.9%
64742-94-5	Solvent naphtha (petroleum), heavy arom.  Asp. Tox. 1, H304	19.0%

4 . FIRST AID MEASURES

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water for 20-30 minutes. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 20 minutes. Seek medical attention if symptoms occur.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May be harmful if inhaled, causing symptoms similar to ingestion.

Skin Contact: Toxic in contact with skin, causing symptoms similar to ingestion.

Eye Contact: May cause eye irritation, redness, tearing and blurred vision.

Ingestion: Fatal if swallowed. Symptoms include headache, dizziness, fatigue, loss of appetite, stomach cramps, nausea, diarrhoea, excessive sweating, tearing and salivation, slowed heartbeat and rippling of surface muscles. Severe poisoning may also cause chest pains, constricted pupils, muscle twitching, incontinence, unconsciousness and seizures. May be fatal if swallowed and enters airways.

5 . FIRE FIGHTING MEASURES

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

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, nitrogen, sulphur and phosphorous, other nitrogen, sulphur and phosphorous compounds, hydrogen cyanide, water and smoke.

(Contd. on page 3)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 09.10.2015

Revision: 09.10.2015

Product Name: 4 FARMERS FENAMIPHOS 400 NEMACIDE & INSECTICIDE

(Contd. of page 2)

Combustible Liquid Class 1. Vapours may travel considerable distances to a source of ignition where they can ignite, flashback, or explode.

Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Wash spill area, preventing runoff from entering drains.

7 . HANDLING AND STORAGE

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container, tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents, acids and bases.

8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:**22224-92-6 fenamiphos (ISO)**

NES	TWA: 0.1 mg/m ³
	Sk

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Respiratory Protection:

Use an approved respirator with a combined dust and vapour cartridge under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

PVC or rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the

(Contd. on page 4)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 09.10.2015

Revision: 09.10.2015

Product Name: 4 FARMERS FENAMIPHOS 400 NEMACIDE & INSECTICIDE

(Contd. of page 3)

frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form:	Liquid
Colour:	Clear yellow to brown
Odour:	Aromatic solvent odour
Odour Threshold:	No information available
pH-Value:	7.00
Melting point/Melting range:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	>61 °C
Flammability:	Combustible Liquid Class 1
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Relative Density:	1.052
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Disperses in water.

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Heat, sparks, open flames, hot surfaces and direct sunlight.

Incompatible Materials: Strong oxidising agents, acids and bases.

Hazardous Decomposition Products:

Oxides of carbon, nitrogen, sulphur and phosphorous, other nitrogen, sulphur and phosphorous compounds, hydrogen cyanide, water and smoke.

11 . TOXICOLOGICAL INFORMATION

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****22224-92-6 fenamiphos (ISO)**

Oral	LD ₅₀	2- 19 mg/kg (rat) 56- 100 mg/kg (guinea pig)
Dermal	LD ₅₀	27- 154 mg/kg (rat)
Inhalation	LC ₅₀	0.11- 0.17 mg/L (rat)

Acute Health Effects

Inhalation: May be harmful if inhaled, causing symptoms similar to ingestion.

(Contd. on page 5)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 09.10.2015

Revision: 09.10.2015

Product Name: 4 FARMERS FENAMIPHOS 400 NEMACIDE & INSECTICIDE

(Contd. of page 4)

Skin: Toxic in contact with skin, causing symptoms similar to ingestion.**Eye:** May cause eye irritation, redness, tearing and blurred vision.**Ingestion:**

Fatal if swallowed. Symptoms include headache, dizziness, fatigue, loss of appetite, stomach cramps, nausea, diarrhoea, excessive sweating, tearing and salivation, slowed heartbeat and rippling of surface muscles. Severe poisoning may also cause chest pains, constricted pupils, muscle twitching, incontinence, unconsciousness and seizures. May be fatal if swallowed and enters airways.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: May be fatal if swallowed and enters airways.**Chronic Health Effects:**

The main health effects from repeated exposure would be toxic symptoms of cholinesterase inhibition - headache, blurred vision, weakness, sweating, mild chest pain, nausea and vomiting and in severe cases cyanosis (blueness of the skin, as from lack of oxygen), muscular twitching, spasms, and respiratory paralysis.

Existing Conditions Aggravated by Exposure: No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for fenamiphos for a human is 0.0001 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.014 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', June 2014).

Target organs identified in studies of test animals and exposed workers are the central nervous system, heart, lungs, and thyroid.

12 . ECOLOGICAL INFORMATION

Ecotoxicity: Fenamiphos is highly toxic to birds and non toxic to bees.**Aquatic toxicity:****22224-92-6 fenamiphos (ISO)**

LC ₅₀	0.11 mg/L (rainbow trout)
	3.2 mg/L (goldfish)
	9.6 mg/L (bluegill)

Very toxic to aquatic life with long lasting effects.

Persistence and Degradability:

Fenamiphos is moderately persistent in soil, with a half-life of 50 days. Fenamiphos is not easily biodegradable.

Bioaccumulative Potential: No information available

(Contd. on page 6)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 09.10.2015

Revision: 09.10.2015

Product Name: 4 FARMERS FENAMIPHOS 400 NEMACIDE & INSECTICIDE

(Contd. of page 5)

Mobility in Soil: Fenamiphos has low mobility in soil.**Other adverse effects:** No information available

13 . DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 . TRANSPORT INFORMATION

UN Number ADG, IMDG, IATA	3018
Proper Shipping Name ADG	ORGANOPHOSPHOROUS PESTICIDE, LIQUID, TOXIC (fenamiphos (ISO)), ENVIRONMENTALLY HAZARDOUS
IMDG	ORGANOPHOSPHOROUS PESTICIDE, LIQUID, TOXIC (fenamiphos (ISO)), MARINE POLLUTANT
IATA	ORGANOPHOSPHOROUS PESTICIDE, LIQUID, TOXIC (fenamiphos (ISO))
Dangerous Goods Class ADG Class:	6.1 Toxic substances.
Packing Group: ADG, IMDG, IATA	II
Marine pollutant:	Yes Symbol (fish and tree)
EMS Number:	F-A,S-A
Hazchem Code:	2X
Special Provisions:	61, 274
Limited Quantities:	100 mL
Packagings & IBCs - Packing Instruction:	P001, IBC02
Packagings & IBCs - Special Packing Provisions:	No information available
Portable Tanks & Bulk Containers - Instructions:	T11
Portable Tanks & Bulk Containers - Special Provisions:	TP2, TP13, TP27

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:

22224-92-6	fenamiphos (ISO)
64742-94-5	Solvent naphtha (petroleum), heavy arom.

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 7

(Contd. on page 7)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 09.10.2015

Revision: 09.10.2015

Product Name: 4 FARMERS FENAMIPHOS 400 NEMACIDE & INSECTICIDE

(Contd. of page 6)

16 . OTHER INFORMATION

Date of Preparation or Last Revision: 09.10.2015**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC₅₀: Lethal concentration, 50 percentLD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

The information contained in this safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. 4Farmers Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.