



FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010
Issue date: 9/1/2022 Version: 1.1

SECTION 1: Identification

1.1. Product identifier

Product form	: Mixture
Trade name	: FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)
Type of product	: Nematicide/Insecticide
CAS-No.	: 22224-92-6
Product group	: End product

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: A systemic soil applied emulsifiable concentrate for the control of nematodes on potatoes, citrus, pineapples, grapes, peaches, nectarines, groundnuts, onions and tobacco and a leaf treatment on potatoes for the control of nematodes and aphids only in the Western Cape.
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1.3. Supplier's details

Supplier

Farm-Ag International (Pty) Ltd
Old Mill Industrial Park
61, Marshall Drive
P.O. Box 1523
4300 Mount Edgecombe – Durban KwaZulu Natal
South Africa
T 031 003 3486

1.4. Emergency telephone number

Emergency number	: 24 Hr Emergency Number: In case of Poisoning: Poison Information Helpline : 0861 555 777
	In case of Spillage: HAZMAT:0800 147 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Flammable liquids, Category 3	H226
Acute toxicity (oral), Category 2	H300
Acute toxicity (dermal), Category 2	H310
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410
Full text of H-statements: see section 16	

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

Signal word (GHS-ZA)	: Danger
Hazardous ingredients	: Fenamiphos 94% TC, calcium dodecylbenzenesulphonate, Solvent Naphtha
Hazard statements (GHS ZA)	: H226 - Flammable liquid and vapour. H300+H310 - Fatal if swallowed or in contact with skin H315 - Causes skin irritation. H318 - Causes serious eye damage. H373 - May cause damage to organs (Pulmonary edema) through prolonged or repeated exposure (Inhalation). H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (GHS ZA)	: 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. 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 equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe vapours/spray. P262 - Do not get in eyes, on skin, or on clothing. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P280 - Wear protective clothing, eye protection, face protection, protective gloves. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P314 - Get medical advice/attention if you feel unwell. P330 - Rinse mouth. P332+P313 - If skin irritation occurs: Get medical advice/attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P362+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use carbon dioxide (CO ₂), dry extinguishing powder to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects	: Flammable liquid and vapour, May cause damage to organs (Respiratory tract) through prolonged or repeated exposure (inhalation), Fatal in contact with skin, Fatal if inhaled, Fatal if swallowed, Causes skin irritation, Causes serious eye damage, Very toxic to aquatic life with long lasting effects.
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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Fenamiphos 94% TC	CAS-No.: 22224-92-6	≥ 35 – < 40	Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Eye Irrit. 2A, H319 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410
Solvent Naphtha	CAS-No.: 64742-94-5	≥ 20 – < 25	Flam. Liq. 3, H226 Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Eye Irrit. 2A, H319 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
1,2 propanediol	CAS-No.: 57-55-6	≥ 15 – < 20	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Acute Tox. Not classified (Inhalation:vapour) Aquatic Acute Not classified
calcium dodecylbenzenesulphonate	CAS-No.: 26264-06-2	≥ 10 – < 15	Acute Tox. 4 (Oral), H302 Acute Tox. 5 (Dermal), H313 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 2, H401 Aquatic Chronic 4, H413
Tristyrylphenol Ethoxylates	CAS-No.: 99734-09-5	≥ 10 – < 15	Aquatic Chronic 2, H411

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Route(s) of entry: Inhalation; Skin Contact; Skin Absorption; Eye Contact.
Human effects and symptoms of overexposure:
Acute effects of exposure: Inhalation, dermal absorption or ingestion of this material may result in systemic intoxication due to inhibition of the enzyme cholinesterase. The sequence of development of systemic effects varies with the route of entry, and the onset of symptoms may be delayed up to 12 hours. Complete symptomatic recovery from sub lethal poisoning usually occurs within one week once the source of exposure is completely removed.
Chronic effects of exposure: Cholinesterase inhibition sometimes persists for 2-6 weeks; thus, repeated exposure to small amounts of this material may result in an unexpected cholinesterase depression causing symptoms such as malaise, weakness, and anorexia that resemble other illnesses such as influenza. Exposure to a concentration that would not have produced symptoms in a person who was not previously exposed may produce severe symptoms of cholinesterase inhibition in a previously exposed person. Repeated skin contact may result in defatting of the skin by the solvents in the product which can lead to redness and irritation of the skin. Chronic overexposure to these solvent components may cause mucous membrane irritation, nausea, and headache, loss of appetite, weakness, and alcohol intolerance.
Medical conditions aggravated by exposure: No specific medical conditions are known which may be aggravated by exposure to the active ingredient in this product; however, any disease, medication, or prior exposure which reduces normal cholinesterase activity may increase susceptibility to the toxic effects of the active ingredient. In addition, certain pre-existing skin disorders may be aggravated by exposure to this product due to the solvent components.

First-aid measures after inhalation

: If a person is overcome by excessive exposure to aerosols or vapours of this material, remove to fresh air or uncontaminated area. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention as soon as possible.

First-aid measures after skin contact

: In case of contact, remove contaminated clothing and wash affected areas with plenty of soap and water. Wash clothing before reuse. Call a physician if irritation develops or persists. If signs of intoxication (poisoning) occur, get medical attention immediately.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion

: If ingestion is suspected, call a physician or poison control centre. Drink one or two glasses of water and induce vomiting by touching back of throat with finger, or, if available, administer syrup of ipecac. If syrup of ipecac is available, administer 1 tablespoonful (15 mL) of syrup of ipecac followed by 1 to 2 glasses of water. If vomiting does not occur within 20 minutes, repeat the dose once. Do not induce vomiting or give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact

: Irritation.

Symptoms/effects after eye contact

: Serious damage to eyes.

4.3. Indication of any immediate medical attention and special treatment needed

This product contains the organophosphorus insecticide. If symptoms of organophosphate poisoning are present, the administration of atropine sulfate is indicated. Administer atropine sulfate in large therapeutic doses. In mild cases, start treatment by giving 1-2 mg of atropine intravenously every 15 minutes until signs of atropinization appear (dry mouth, flushing, and dilated pupils if pupils were originally pinpoint). In severe cases, start treatment by giving 2-4 mg intravenously every 5-10 minutes until fully atropinized. Dosages for children should be appropriately reduced. 2-PAM is also antidotal and may be administered in conjunction with atropine. Do not give morphine. Watch for pulmonary edema which may develop in serious cases of poisoning even after 24 hours. At first sign of pulmonary edema, place patient in oxygen tent and treat symptomatically.

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Keep out of smoke. Cool exposed containers with water spray. Fight fire from upwind position. Use self-contained breathing equipment. Contain runoff to prevent entry into sewers or waterways. Equipment or materials involved in pesticide fires may become contaminated.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Isolate area and keep unauthorized people away. Do not walk through spilled material. Avoid breathing vapors and skin contact. Remove sources of ignition if combustible or flammable vapors may be present and ventilate area. Wear proper protective equipment. Dike contaminated area with absorbent granules, soil, sand, etc. If large spill - material should be recovered. Small spills can be absorbed with absorbent granules, spill control pads, or any absorbent materials. Carefully sweep up absorbed spilled material. Place in covered container for reuse or disposal. Scrub contaminated area with detergent and bleach solution and/or detergent and lye in water solution. Repeat. Rinse with water. Use dry absorbent material such as clay granules to absorb and collect wash solution for proper disposal. Contaminated soil may have to be disposed. Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

Other information : Dispose of materials or solid residues at an authorized site.

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
- Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.
- Information on mixed storage : KEEP SUBSTANCE AWAY FROM: Water supplies. Food supplies.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,2 propanediol (57-55-6)

South Africa - Occupational Exposure Limits (Recommended Limits)

Local name	Propane-1,2-diol (Propylene glycol)
OEL TWA	470 mg/m ³ vapour + particulates 10 mg/m ³ particulates
OEL TWA [ppm]	150 ppm vapour + particulates
Regulatory reference	Government Notice. R: 1179

South Africa - Occupational Exposure Limits (Airborne Pollutants)

Local name	Propylene glycol (Propane-1,2-diol)
OEL TWA	470 mg/m ³ total (particulate & vapor) 10 mg/m ³ particulate
OEL TWA [ppm]	150 ppm total (particulate & vapor)
Regulatory reference	Government Notice No. R 904

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

- Hand protection : Protective gloves
- Eye protection : Safety glasses
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Clear brown to light brown liquid.
Odour	: Aromatic odour.
Odour threshold	: No data available
pH	: 5.5 – 5.6
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: 0 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 30 – 35 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.066
Relative density of saturated gas/air mixture	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: Water: 560 ppm
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Fatal if swallowed.
Acute toxicity (dermal) : Fatal in contact with skin.
Acute toxicity (inhalation) : Not classified

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l) (22224-92-6)

ATE ZA (oral)	10.082 mg/kg bodyweight
ATE ZA (Dermal)	171.338 mg/kg bodyweight
Unknown acute toxicity (GHS ZA)Unknown acute toxicity (GHS ZA)	32.92% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 11.26% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 100% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Fenamiphos 94% TC (22224-92-6)

LD50 oral rat	6 mg/kg (Rat, Experimental value, Oral)
LD50 dermal rat	80 mg/kg (24 h, Rat, Experimental value, Dermal)
LC50 Inhalation - Rat (Dust/Mist)	0.12 mg/l/4h

calcium dodecylbenzenesulphonate (26264-06-2)

LD50 oral rat	1300 mg/kg bodyweight Animal: rat, Guideline: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

1,2 propanediol (57-55-6)

LD50 oral rat	22000 mg/kg (Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat (Vapours)	> 44.9 mg/l/4h

Solvent Naphtha (64742-94-5)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.1175 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity)

Skin corrosion/irritation : Slightly irritating
pH: 5.5 – 5.6
Serious eye damage/irritation : Slight eye irritant
pH: 5.5 – 5.6

calcium dodecylbenzenesulphonate (26264-06-2)

Additional information	100 mg/24 h Moderate
Respiratory or skin sensitisation	: Not a skin sensitizer
Germ cell mutagenicity	: When tested in cytogenetic studies under in vivo conditions, fenamiphos gave no indication of genotoxic potential.
Carcinogenicity	: Fenamiphos was investigated for carcinogenicity in chronic feeding studies using mice and rats. There was no evidence of a carcinogenic potential observed in either species at dose levels up to and including 50 ppm, the highest dose tested.

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs (Pulmonary edema) through prolonged or repeated exposure (Inhalation).

calcium dodecylbenzenesulphonate (26264-06-2)	
LOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
LOAEL (dermal, rat/rabbit, 90 days)	286 mg/kg bodyweight Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	< 286 mg/kg bodyweight Animal: rat, Animal sex: male
	May cause damage to organs through prolonged or repeated exposure.

Solvent Naphtha (64742-94-5)	
LOAEL (oral, rat, 90 days)	1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEL (dermal, rat/rabbit, 90 days)	200 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
LOAEC (inhalation, rat, vapour, 90 days)	4.71 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	2000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEC (inhalation, rat, vapour, 90 days)	2355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

Fenamiphos 94% TC (22224-92-6)	
LC50 - Fish [1]	0.0096 mg/l (96 h, Lepomis macrochirus, Fresh water, Experimental value)
LC50 - Fish [2]	0.0721 mg/l (96 h, Salmo gairdneri, Fresh water, Experimental value)
EC50 - Crustacea [1]	0.0019 mg/l (48 h, Daphnia magna, Experimental value)
EC50 72h - Algae [1]	> 10 mg/l (Scenedesmus subspicatus, Experimental value, Growth rate)
ErC50 algae	11 mg/l
Partition coefficient n-octanol/water (Log Kow)	3.3 (20 °C)
Additional ecotoxicological information	Birds: Acute oral LD50 for bobwhite quail 0.7-1.6, mallard ducks 0.9-1.2 mg/kg. Dietary LC50 for mallard ducks 316, bobwhite quail 38 mg/kg diet. Other aquatic spp: Very toxic to fish and aquatic invertebrates. Bees (LD50, mg/kg) 0.45 (oral)

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

calcium dodecylbenzenesulphonate (26264-06-2)

LC50 - Fish [1]	1.74 mg/l Test organisms (species): other:
NOEC (chronic)	0.253 mg/l Test organisms (species): other: Duration: '30 d'
NOEC chronic fish	0.23 mg/l Test organisms (species): other: Duration: '30 d'

1,2 propanediol (57-55-6)

LC50 - Fish [1]	40613 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
ErC50 algae	24200 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	-1.07 (Experimental value, EU Method A.8: Partition Coefficient, 20.5 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.46 (log Koc, Calculated value)

Solvent Naphtha (64742-94-5)

LC50 - Fish [1]	8.41 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	4.7 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	12.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	18.9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l) (22224-92-6)

Persistence and degradability	No additional information available
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Fenamiphos 94% TC (22224-92-6)

Persistence and degradability	No inhibition of biodegradation process in the soil.
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1,2 propanediol (57-55-6)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.96 – 1.08 g O ₂ /g substance
Chemical oxygen demand (COD)	1.63 g O ₂ /g substance
ThOD	1.69 g O ₂ /g substance

12.3. Bioaccumulative potential

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l) (22224-92-6)

Bioaccumulative potential	No additional information available
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Fenamiphos 94% TC (22224-92-6)

Partition coefficient n-octanol/water (Log Kow)	3.3 (20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

1,2 propanediol (57-55-6)

Partition coefficient n-octanol/water (Log Pow)	-1.07 (Experimental value, EU Method A.8: Partition Coefficient, 20.5 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.46 (log Koc, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

12.4. Mobility in soil

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l) (22224-92-6)

Mobility in soil : No additional information available

Fenamiphos 94% TC (22224-92-6)

Partition coefficient n-octanol/water (Log Kow) : 3.3 (20 °C)

Ecology - soil : No (test)data on mobility of the substance available.

1,2 propanediol (57-55-6)

Surface tension : 71.6 mN/m (21.5 °C, 1.01 g/l, EU Method A.5: Surface tension)

Partition coefficient n-octanol/water (Log Pow) : -1.07 (Experimental value, EU Method A.8: Partition Coefficient, 20.5 °C)

Organic Carbon Normalized Adsorption Coefficient (Log Koc) : 0.46 (log Koc, Calculated value)

Ecology - soil : Highly mobile in soil.

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal considerations










13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
2903	2903	2903
14.2. Proper Shipping Name		
PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. (contains fenamiphos 400 g/l)	PESTICIDE, LIQUID, TOXIC, FLAMMABLE, N.O.S. (contains fenamiphos 400 g/l)	Pesticide, liquid, toxic, flammable, n.o.s. (contains fenamiphos 400 g/l)
14.3. Transport hazard class(es)		
6.1 (3)	6.1 (3)	6.1 (3)
 6	 6	 6
 3	 3	 3
		
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

14.6. Special precautions for user

SANS

Special provisions (SANS)	: 61, 274
Limited quantities (SANS)	: 100 ml
Limited quantities (SANS)	: 100 ml
Packagings, large packagings and IBCs Packing instructions (SANS)	: P001, IBC02
Portable tank and bulk containers instructions (SANS)	: T11
Portable tank and bulk container special provisions (SANS)	: TP2, TP13, TP27

IMDG

Special provisions (IMDG)	: 61, 274
Limited quantities (IMDG)	: 100 ml
Excepted quantities (IMDG)	: E4
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T11
Tank special provisions (IMDG)	: TP2, TP13, TP27
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	: B
Flash point (IMDG)	: 23°C to 60°C c.c.
Properties and observations (IMDG)	: Liquid flammable pesticides having a flashpoint between 23°C and 60°C c.c., presenting a very wide range of toxic hazard. They frequently contain petroleum or coal tar distillates, or other flammable liquids. Flashpoint and miscibility with water depend upon the composition. Toxic if swallowed, by skin contact or by inhalation.

IATA

PCA Excepted quantities (IATA)	: E4
PCA Limited quantities (IATA)	: Y641
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 654
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 662
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A4
ERG code (IATA)	: 6F

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date : 01/09/2022

Full text of H-statements

H226	Flammable liquid and vapour.
H300	Fatal if swallowed.
H302	Harmful if swallowed.

FarmAg Fenamiphos 400 EC (Fenamiphos 400 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010

Full text of H-statements	
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H313	May be harmful in contact with skin
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Safety Data Sheet (SDS), South Africa

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.