SAFETY DATA SHEET

Seraphos 1250

Section 1. Identification

Product identifier : Seraphos 1250

Product code : 122000017764

Other means of identification : 80562684

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

Identified uses : Veterinary product.

Uses advised against : None known.

Company Name : Elanco New Zealand
106 Wiri Station Road, Manukau, Auckland 2140

Telephone number : +64 0800 352 626

0800 446 121 (Adverse Events Local Number)

Emergency telephone number : CHEMTREC International: 00 1 703-527-3887 (24 hours)
CHEMTREC: +64 9-801 0034 (Local)
CHEMTREC: 0800 425 459 (Freephone)

Email : elanco_sds@elancoah.com

Section 2. Hazards identification

HSNO Approval Number : HSR001803

HSNO Group Standard : Veterinary Medicine Dispersive Use

HSNO Classification : FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (oral) - Category 3
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
HAZARDOUS TO TERRESTRIAL VERTEBRATES
HAZARDOUS TO TERRESTRIAL INVERTEBRATES

This material is classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

This material is classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2020 Transport of Dangerous Goods on Land.

GHS label elements

Signal word : Danger

Hazard statements : H227 - Combustible liquid.
H301 - Toxic if swallowed.
H372 - Causes damage to organs through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

General : Do not apply directly into or onto water.
Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Prevention : P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.
P260 - Do not breathe vapour.
P270 - Do not eat, drink or smoke when using this product.

Section 2. Hazards identification

P264 - Wash thoroughly after handling.
Do not apply substance to plants if - (a) Bees are foraging; or (b) The plants are in flower or part flower and are likely to be visited by non-target invertebrate pollinators (including bees).
Do not apply the substance to a plant if the plant is likely to flower within [***] days.

Response : P391 - Collect spillage.
P301 + P310, P330 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth.

Storage : P405 - Store locked up.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Symbol :

Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
Propetamphos	≥30 - ≤60	31218-83-4
Solvent naphtha (petroleum), heavy arom.	≥30 - ≤60	64742-94-5
Polyethylene glycol, mono(p-nonylphenyl) ether, branched	≥10 - ≤30	127087-87-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : Toxic if swallowed.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

Skin : No specific data.

Eyes : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Specific treatments : No specific treatment.

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable : Use dry chemical, CO_2, water spray (fog) or foam.

Not suitable : Do not use water jet.

Specific hazards arising from the chemical : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides

Hazchem code : 2X

Special precautions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Protective measures

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
None.	

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Colour : Yellow.

Odour : Not available.

Odour threshold : Not available.

Section 9. Physical and chemical properties and safety characteristics

pH : Not available.

Melting point/freezing point : Not available.

Boiling point, initial boiling point, and boiling range : 155°C (311°F)

Flash point : Closed cup: 63 to 90°C (145.4 to 194°F)

Evaporation rate : Not available.

Flammability : Not available.

Lower and upper explosion limit/flammability limit : Not available.

Vapour pressure :

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Solvent naphtha (petroleum), heavy arom.	0.02	0.0027				

Relative vapour density : Not available.

Relative density : Not available.

Density : 1 to 1.2 g/cm³

Solubility(ies) : Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
Solvent naphtha (petroleum), heavy arom.	220 to 250	428 to 482	ASTM E 659

Decomposition temperature : Not available.

Viscosity : Not available.

Flow time (ISO 2431) : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Reactive or incompatible with the following materials:
oxidising materials

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

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation : No known significant effects or critical hazards.

Ingestion : Toxic if swallowed.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

Ingestion : No specific data.

Skin contact : No specific data.

Eye contact : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Propetamphos	LD50 Dermal LD50 Oral	Rat Rat	564 mg/kg 62400 µg/kg	- -
Solvent naphtha (petroleum), heavy arom.	LD50 Oral	Rat	6318 mg/kg	-
Polyethylene glycol, mono(p-nonylphenyl) ether, branched	LD50 Oral	Rat	1602 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Solvent naphtha (petroleum), heavy arom.	Skin - Mild irritant	Rabbit	-	24 hours 500 uL	-
Polyethylene glycol, mono(p-nonylphenyl) ether, branched	Eyes - Severe irritant	Rabbit	-	168 hours	-

Sensitisation

Not available.

Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Chronic toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Polyethylene glycol, mono(p-nonylphenyl) ether, branched	Chronic NOAEL Oral	Rat - Male, Female	1000 mg/kg	-

Carcinogenicity

Not available.

Mutagenicity

Section 11. Toxicological information

Product/ingredient name	Test	Experiment	Result
Polyethylene glycol, mono(p-nonylphenyl) ether, branched	OECD 471 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Metabolic activation: with and without metabolic activation	Negative

Teratogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Seraphos 1250	Category 1	-	-
Propetamphos	Category 1	-	-

Aspiration hazard

Product/ingredient name
Solvent naphtha (petroleum), heavy arom.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Seraphos 1250	100	N/A	N/A	N/A	N/A
Propetamphos	62.4	564	N/A	3	N/A
Solvent naphtha (petroleum), heavy arom.	6318	N/A	N/A	N/A	N/A
Polyethylene glycol, mono(p-nonylphenyl) ether, branched	1602	N/A	N/A	N/A	N/A

Section 12. Ecological information

Ecotoxicity : This material is very toxic to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
trans-isopropyl-3-[[(ethylamino) methoxyfosfinothioyl]oxy] crotonate	LC50 2.9 mg/l	Algae - Desmodesmus subspicatus (green algae)	96 hours
	Acute EC50 9.5 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 27 µg/l Fresh water	Crustaceans - Gammarus roeseli	48 hours
	Acute EC50 3.3 ppb Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 191 ppb Fresh water	Fish - Lepomis macrochirus	96 hours
	Chronic EC10 1.9 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 0.1 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Solvent naphtha (petroleum), heavy arom.	Acute LC50 3 mg/l	Fish - Oncorhynchus mykiss	96 hours

Section 12. Ecological information

4-Nonylphenol, branched, ethoxylated	Acute EC10 56 mg/l Acute EC50 14 mg/l	Algae Daphnia - Daphnia magna Straus	1 hours 48 hours

Persistence/degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
trans-isopropyl-3-[[(ethylamino) methoxyfosfinothioyl]oxy] crotonate	3.82	-	Low
Solvent naphtha (petroleum), heavy arom.	2.8 to 6.5	99 to 5780	High
4-Nonylphenol, branched, ethoxylated	-	7.6 to 16	Low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	New Zealand - Land - road/ railway	IMDG	IATA
UN number	UN3018	UN3018	UN3018
UN proper shipping name	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (PROPETAMPHOS)	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (PROPETAMPHOS)	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (PROPETAMPHOS)
Transport hazard class(es)	6.1 	6.1 	6.1 
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Section 14. Transport information

Additional information

New Zealand : The marine pollutant mark is not required when transported by road or rail.
Hazchem code 2X

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

HSNO Approval Number : HSR001803

HSNO Group Standard : Veterinary Medicine Dispersive Use

HSNO Classification : FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (oral) - Category 3
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
HAZARDOUS TO TERRESTRIAL VERTEBRATES
HAZARDOUS TO TERRESTRIAL INVERTEBRATES

ACVM No. : A004265

Inventory list

New Zealand : All components are listed or exempted.

Section 16. Other information

History

Date of issue/Date of revision : 4/24/2023

Date of previous issue : No previous validation

Version : 0.01

Key to abbreviations : ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
SGG = Segregation Group
UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

For additional information contact:
Elanco Animal Health
0011+1-877-352-6261
0011+1-800-428-4441