



# SAFETY DATA SHEET

Vigest

## Section 1. Identification

**Product identifier** : Vigest  
**Product code** : 122000017855  
**Other means of identification** : 59369303, 59369877, 59370018, 80665512, 82538607, 86510154, 86510197; AH9198

### 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** : HSR002521  
**HSNO Group Standard** : Animal Nutritional and Animal Care Products  
**HSNO Classification** : EYE IRRITATION - Category 2  
RESPIRATORY SENSITISATION - Category 1  
SKIN SENSITISATION - Category 1  
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3  
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 36%

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

This material is not 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** : H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H412 - Harmful 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. Wear eye or face protection.  
P284 - Wear respiratory protection.  
P273 - Avoid release to the environment.  
P261 - Avoid breathing vapour.  
P264 - Wash thoroughly after handling.  
P272 - Contaminated work clothing should not be allowed out of the workplace.

## Section 2. Hazards identification

**Response** : P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.  
P362 + P364 - Take off contaminated clothing and wash it before reuse.  
P302 + P352 - IF ON SKIN: Wash with plenty of water.  
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 - If eye irritation persists: Get medical advice or attention.

**Storage** : Not applicable.

**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)	Identifiers
Sodium chloride	≤10	7647-14-5
Niacin	≤5	59-67-6
Potassium chloride	≤5	7447-40-7
propane-1,2-diol	≤3	57-55-6
glycerol	≤3	56-81-5
Guar gum	<1	9000-30-0
Propylparaben	≤0.3	94-13-3
Bronopol	≤0.1	52-51-7

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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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. In the event of any complaints or symptoms, avoid further exposure.

## Section 4. First aid measures

- Ingestion** : 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. Get medical attention if adverse health effects persist or are severe. 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** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- 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.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Inhalation** : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Eye contact** : Causes serious eye irritation.

#### Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:  
irritation  
redness
- Eyes** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

### 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful 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.

## Section 5. Firefighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
halogenated compounds  
metal oxide/oxides
- Hazchem code** : Not available.
- 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.
- 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- 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.

### Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. 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. 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). Persons with a history of skin sensitisation problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Section 7. Handling and storage

**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 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. 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
propane-1,2-diol	<p><b>HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023)</b>  WES-TWA 8 hours: 150 ppm. Form: Vapor and particulates.  WES-TWA 8 hours: 474 mg/m<sup>3</sup>. Form: Vapor and particulates.  WES-TWA 8 hours: 10 mg/m<sup>3</sup>. Form: Particulate.</p> <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020)</b>  TWA 8 hours: 474 mg/m<sup>3</sup>. Form: total vapour and particulates.  TWA 8 hours: 150 ppm. Form: total vapour and particulates.  TWA 8 hours: 10 mg/m<sup>3</sup>. Form: Particulate.</p> <p><b>Safe Work Australia (Australia, 10/2022)</b>  TWA 8 hours: 150 ppm. Form: Vapor and particulates.  TWA 8 hours: 474 mg/m<sup>3</sup>. Form: Vapor and particulates.  TWA 8 hours: 10 mg/m<sup>3</sup>. Form: Particulate.</p>
glycerol	<p><b>HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023)</b>  WES-TWA 8 hours: 10 mg/m<sup>3</sup>. Form: Mist.</p> <p><b>EH40/2005 WELs (United Kingdom (UK), 1/2020)</b>  TWA 8 hours: 10 mg/m<sup>3</sup>. Form: Mist.</p> <p><b>Safe Work Australia (Australia, 10/2022)</b>  TWA 8 hours: 10 mg/m<sup>3</sup>.</p>

#### Biological exposure indices

No exposure indices known.

**Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

## Section 8. Exposure controls/personal protection

**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. Contaminated work clothing should not be allowed out of the workplace. 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: chemical splash goggles.

### 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** : Brown. [Dark]

**Odour** : Not available.

**Odour threshold** : Not available.

**pH** : Not available.

**Melting point/freezing point** : Not available.

**Boiling point or initial boiling point and boiling range** : Not available.

**Flash point** :

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
propane-1,2-diol	99	210.2				
glycerol				177	350.6	
nicotinic acid				193	379.4	

## Section 9. Physical and chemical properties and safety characteristics

**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
water	23.8	3.2				
propane-1,2-diol	0.15	0.02	EU A.4			
glycerol	0.000075	0.00001		0	0	
propyl 4-hydroxybenzoate	0.0000026	0.00000035		0.00034	0.000045	
lysine hydrochloride	<0	<0	OECD 104			
bronopol (INN)	0	0		0	0	

**Relative vapour density** : Not available.

**Relative density** : Not available.

**Solubility(ies)** : Not available.

**Solubility in water** : Not available.

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

**Auto-ignition temperature** :

Ingredient name	°C	°F	Method
glycerol	370	698	
propane-1,2-diol	371	699.8	
methyl 4-hydroxybenzoate	>403	>757.4	
nicotinic acid	580	1076	

**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** : No specific data.

**Incompatible materials** : No specific data.

**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** : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Eye contact** : Causes serious eye irritation.

## Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma
- Ingestion** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

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

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sodium chloride	LC50 Inhalation Dusts and mists	Rat	>4200 mg/m <sup>3</sup>	1 hours
	LD50 Dermal	Rabbit	>10000 mg/kg	-
	LD50 Oral	Rat	3000 mg/kg	-
Niacin	LD50 Oral	Rat	7 g/kg	-
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
	LD50 Dermal	Rabbit	20800 mg/kg	-
propane-1,2-diol	LD50 Oral	Rat	20 g/kg	-
	LD50 Dermal	Rabbit	>10 g/kg	-
glycerol	LD50 Oral	Rat	12600 mg/kg	-
	LD50 Oral	Rat	6770 mg/kg	-
Guar gum	LD50 Oral	Rat	6770 mg/kg	-
Bronopol	LC50 Inhalation Dusts and mists	Rat	800 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rat	>1600 mg/kg	-
	LD50 Oral	Rat	180 mg/kg	-

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Sodium chloride	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	propane-1,2-diol	Eyes - Mild irritant	Rabbit	-	100 mg
Eyes - Mild irritant		Rabbit	-	24 hours 500 mg	-
glycerol	Skin - Mild irritant	Human	-	168 hours 500 mg	-
	Skin - Mild irritant	Woman	-	96 hours 30 %	-
	Skin - Moderate irritant	Child	-	96 hours 30 % C	-
glycerol	Skin - Moderate irritant	Human	-	72 hours 104 mg I	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-

Product name : Vigest

NZ : ENGLISH

## Section 11. Toxicological information

Bronopol	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Human	-	10 mg	-
	Skin - Moderate irritant	Rabbit	-	80 mg	-

### Respiratory or skin sensitization

Not available.

### Potential chronic health effects

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Inhalation** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- 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

Not available.

### Carcinogenicity

Not available.

### Mutagenicity

Not available.

### Teratogenicity

Not available.

### Reproductive toxicity

Not available.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Bronopol	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Bronopol	Category 2	-	-

### Aspiration hazard

Not available.

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Sodium chloride	3000	N/A	N/A	N/A	N/A
Niacin	7000	N/A	N/A	N/A	N/A
Potassium chloride	2600	N/A	N/A	N/A	N/A
propane-1,2-diol	20000	20800	N/A	N/A	N/A
glycerol	12600	N/A	N/A	N/A	N/A
Guar gum	6770	N/A	N/A	N/A	N/A
Bronopol	180	1100	N/A	N/A	0.8

## Section 12. Ecological information

**Ecotoxicity** : This material is harmful to aquatic life with long lasting effects.

### Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 52.64 mg/dm3 Fresh water	Algae - Scenedesmus quadricauda	72 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 402.6 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
potassium chloride	Acute EC50 9.24 g/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 1337000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 83000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours
propane-1,2-diol	Acute LC50 509.65 mg/l Fresh water	Fish - Danio rerio	96 hours
	EC50 19000 mg/l	Aquatic plants	72 hours
	EC50 34400 mg/l	Daphnia	48 hours
	Acute LC50 1020000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
glycerol	Acute LC50 710000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 54000 mg/l	Fish	96 hours
Guar gum	Acute LC50 42000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 218000 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
propyl 4-hydroxybenzoate bronopol (INN)	Acute EC50 7 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 0.02 ppm Fresh water	Algae - Desmodesmus subspicatus	96 hours
	Acute EC50 1.6 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 11.17 ppm Fresh water	Fish - Lepomis macrochirus	96 hours
	Chronic NOEC 1.94 ppm	Fish - Oncorhynchus mykiss	49 days

### Persistence/degradability

## Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
propane-1,2-diol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	38 % - Not readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
propane-1,2-diol	-	-	Not readily
bronopol (INN)	-	-	Not readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
nicotinic acid	0.36	-	Low
propane-1,2-diol	-1.07	-	Low
glycerol	-1.76	-	Low
propyl 4-hydroxybenzoate	3.04	-	Low
bronopol (INN)	0.18	-	Low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : 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. 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
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-
<b>Transport hazard class(es)</b>	-	-	-
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	No.	No.

## Section 14. Transport information

**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** : HSR002521  
**HSNO Group Standard** : Animal Nutritional and Animal Care Products  
**HSNO Classification** : EYE IRRITATION - Category 2  
RESPIRATORY SENSITISATION - Category 1  
SKIN SENSITISATION - Category 1  
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3  
**ACVM No.** : Exempt  
**Inventory list**  
**New Zealand** : Not determined.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 8/7/2024

**Date of previous issue** : 11/23/2023

**Version** : 0.03

**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

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