

Section 1 - Identification of the Material and Supplier

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CHEMTREC 0800 293702 (Freephone)
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Email: elanco_sds@elanco.com

Trade Name: **Cyrex Liquid**

Product Use: As described on the product label:

For the prevention and treatment of blowfly strike in all breeds of sheep.
For the control of lice on coarse wool breeds of sheep.
For the treatment of lice on long-wool Merino sheep.

This version issued: **19 October 2017** and is valid for 5 years from this date.

National Poisons Centre: **Phone 0800 764 766 (0800 POISON) in New Zealand**

Section 2 - Hazards Identification

EPA Approval Code: HSR007851

Hazard Classifications:

- 6.1E: Acute toxicity
- 6.9B: Target organ toxicity
- 9.1C: Aquatic ecotoxicant
- 9.2C: Soil ecotoxicant
- 9.4A: Invertebrate ecotoxicant



GHS Signal word:

Warning

HAZARD STATEMENT:

- H303: May be harmful if swallowed.
- H373: Spinosad may cause damage to organs through prolonged or repeated exposure. Cyromazine may cause damage to blood and the haematopoietic system through prolonged or repeated exposure.
- H412: Harmful to aquatic with long lasting effects.
- H423: Harmful to the soil environment.
- H441: Very toxic to terrestrial invertebrates.

PREVENTION

- P102: Keep out of reach of children
- P103: Read label before use.
- P260: Do not breathe mist.
- P273: Avoid release to the environment.

RESPONSE

- P101: If medical advice is needed, have product container or label at hand.
- P314: Get medical advice if you feel unwell.
- H391: Collect spillage.

STORAGE

No storage statements.

DISPOSAL

- P501: Dispose of contents and containers as specified on the registered label.

**Section 3 - Composition/Information on Ingredients**

Ingredient	CAS number	Concentration	Hazard Classifications for ingredient
Spinosad	168316-95-8	1.25%	6.9B, 9.1C, 9.4A
Cyromazine	66215-27-8	50.0%	6.1E, 6.9B, 9.2C
Propylene glycol	57-55-6	4.0%	6.9B
Other ingredients	NA	To 100	

Section 4 - First Aid Measures

General Information: You should call a National Poisons Centre if you feel irritated by this product. The number is 0800 764 766 in New Zealand, and is available at all times. Have this SDS with you when you call.

Inhalation: If inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin Contact: Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for few minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard.

Eye Contact: If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a National Poisons Centre, or call a doctor.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness.

Extinguishing Media: In case of fire, use carbon dioxide, dry chemical, foam, water fog.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. Recommended personal protective equipment is full fire kit and breathing apparatus.

Flash point: No data available

Auto ignition temperature: No data available

Flammability Class: No data available

Section 6 - Accidental Release Measures

Personal Precautions: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained. See Section 8 of the SDS for Personal Protective Equipment. Avoid contact with skin, eyes and clothing.

Environmental Precautions: Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes. Avoid release to the environment.

Methods and Materials for Containment and Cleaning up: Clean up promptly and shovel the absorbed spill into drums for disposal. Large spills due to traffic accidents, etc., should be reported immediately to Elanco Animal Health for assistance.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Store below 30°C in original container, tightly closed, away from direct sunlight, in a cool, dry place. Do not freeze. Do not store with food. Keep out of reach of children.



Section 8 - Exposure Controls and Personal Protection

Occupational exposure limits: Spinosad: Supplier: TWA 0.3 mg/m³
Propylene glycol: AIHA: TWA 10 mg/m³ for 8 hours (aerosol only)

Engineering Controls: Laboratory fume hood or local exhaust ventilation.

Ventilation: Make sure that the work environment remains clean.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC.

Respirator: In case of insufficient ventilation, wear suitable respiratory equipment.

Section 9 - Physical and Chemical Properties:

Appearance:	White to off-white aqueous suspension
Odour:	Earthy
Odour threshold:	No data available
pH:	6.5 – 9.0
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	1.125 – 1.165
Solubility (water):	Soluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Kinematic viscosity:	No data available

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities: Strong oxidising agents.

Fire Decomposition: Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed.

Section 11 - Toxicological Information

Hazardous properties	Ingredient	Toxicological (health) effects
Acute toxicity:	Spinosad	Oral: LD50 (male rat) 4444 mg/kg LD50 (female rat) >5000 mg/kg LDLo (dog) >400 mg/kg
	Cyromazine	Oral: LD50 (rat) 3387 mg/kg
	Spinosad	Inhalation: LC50 (rat) >5180 mg/m ³ (4h)
	Cyromazine	Inhalation: LC50 (rat) >2720 mg/m ³ (4h)



	Spinosad	Dermal: LD50 (rabbit) >5000 mg/kg
	Cyromazine	Dermal: LD50 (rat) >3100 mg/kg
Aspiration hazard:		No information available
Respiratory irritation:		No information available
Skin corrosion/irritation:	Spinosad	Rabbit: no irritation
	Cyromazine	Rabbit: slight irritant
Serious eye damage/ irritation:	Spinosad	Rabbit: slight irritation
	Cyromazine	Rabbit: slight irritation
Respiratory or skin sensitisation:	Spinosad	Guinea pig: Did not cause sensitisation on laboratory animals
	Cyromazine	Guinea pig: Did not cause sensitisation on laboratory animal
Germ cell mutagenicity:	Spinosad	Result in genetic toxicity assays (in vitro and in vivo): Negative
	Cyromazine	No evidence of mutagenic effects has been obtained
Carcinogenicity:	Spinosad	Did not cause cancer in long term animal studies.
	Cyromazine	Material has been extensively tested on laboratory mammals and in test tube systems. No evidence of carcinogenic effects was obtained.
	Propylene glycol	Multiple long term dietary, inhalation, and dermal studies demonstrated no evidence of carcinogenicity in mice, rabbits, or rats.
Reproductive toxicity:	Spinosad	In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.
	Cyromazine	No evidence of teratogenic or reproductive effects in extensive laboratory testing on mammals and in test tube systems.
Specific organ toxicity:	Spinosad	In animals, has been shown to cause vacuolation of cells in liver, kidney and bone tissues and changes in blood and serum biochemistry. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.
	Cyromazine	Short-term rat and dog studies and long-term mice and rat studies consistently showed a reduction in body weight gain at high dose levels and was largely reversible after treatment was discontinued. Reduced erythrocyte and haemoglobin levels were observed at high doses.
Narcotic effects:		No information available

**Section 12 - Ecological Information**

Hazardous properties	Ingredient	Ecotoxicity
Aquatic:	Spinosad	Fish: LC50 / 96h / Lepomis macrochirus: 5.94 mg/L LC50 / 96h / Oncorhynchus mykiss: 30 mg/L
	Cyromazine	Fish: LC50 / 96h / Rainbow trout: >87.9 ppm LC50 / 96h / Bluegill: >89.7 ppm LC50 / 96h / Channel catfish: >91.6 ppm
	Spinosad	Algae: EC50 / Pseudokirchneriella subcapitata: >105.5 ppm EC50 / Navicula sp.: 0.107 mg/l
	Spinosad	Daphnia: EC50 / 48 h / Daphnia magna: 92.7 mg/l
	Cyromazine	Daphnia: EC50 / 48 h / Daphnia magna: >97.8 ppm
Terrestrial:	Cyromazine	Adult Bees: at >5ug/bee
	Cyromazine	Rabbit: LD50/oral: 1467 mg/kg

Persistence and degradability:

No data available

Bioaccumulative:

Spinosad: Does not bioconcentrate in aquatic organisms. Not persistent due to photolysis and biodegradation.

Cyromazine: Environmental fate Log Kow – 0.96, not expected to bioaccumulate in aquatic organisms. Soluble in water and may leach from soil into groundwater.

Mobility in soil:

No data available

Other adverse effects:

No data available

Section 13 - Disposal Considerations**Disposal:** Follow the label directions.

Preferably dispose of the product by use. Otherwise dispose of product and packaging at an approved landfill or other approved facility. Triple rinse container with water and dispose of rinsate away from waterways. Crush or puncture and bury in a suitable landfill, or if appropriate recycle. Do NOT use container for any other purpose.

Section 14 - Transport Information**UN Number:** Not applicable**UN proper shipping name:** Not applicable**UN dangerous goods class and subsidiary risk:** Not applicable**UN Packaging Group:** III**Environmental hazards:** Not applicable**Special precautions when transporting the substance:** Not applicable



Section 15 - Regulatory Information

EPA Approval Code: HSR007851

Hazard Classifications:

- 6.1E: Acute toxicity
- 6.9B: Target organ toxicity
- 9.1C: Aquatic ecotoxificant
- 9.2C: Soil ecotoxificant
- 9.4A: Invertebrate ecotoxificant

Certified handler: Not required

Tracking: Not required

ACVM No: A009917

For conditions of registration see www.foodsafety.govt.nz

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

This version issued: 19 October 2017 and is valid for 5 years from this date.

Acronyms:

CAS number	Chemical Abstracts Service Registry Number
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms
LD50	Lethal Dose for 50% of test organisms
LC50	Lethal Concentration of chemical in the air or water that will kill 50% of the test animals when administered a single exposure.
LDLo	The lowest amount of a solid or liquid material reported to have caused the death of animals or humans
EC50	Median effective concentration
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS.

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accordance with the HSNO Safety Data Sheet guidelines.