



SAFETY DATA SHEET

1. Identification

Product identifier	Elanco AH0493 Extinosad Pour-On for Sheep
Other means of identification	
Synonyms	Spinosad pour-on for sheep and cattle * Spinosad formulation * 232105 formulation
Item Code	AH0493
Recommended use of the chemical and restrictions on use	
Recommended use	Veterinary Product
Restrictions on use	Not available.
Details of manufacturer or importer	
Company name	Elanco Australasia Pty Ltd. ACN: 076 745 198
Address	112 Wharf Road West Ryde, NSW 2114 Australia
Telephone	1800 226 324 (toll free)
e-mail	lilly_msds@lilly.com
Emergency phone number	Elanco Australasia 1800 226 324 (toll free)
24 hr emergency contact number	CHEMWATCH 1800 039 008 (spills and accidents)
24 hr emergency contact number (Local)	CHEMWATCH +61 2 9186 1132 (spills and accidents)

2. Hazard(s) identification

Classification of the hazardous chemical		
Physical hazards	Not classified.	
Health hazards	Serious eye damage/eye irritation	Category 2A
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2

Label elements, including precautionary statements

Hazard symbol(s)



Exclamation mark Environment

Signal word

Warning

Hazard statement(s)

Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

Wear eye/face protection. Wash hands thoroughly after handling.

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage

Not available.

Disposal

Not available.

Other hazards which do not result in classification None known.

Supplemental information None.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Spinosad	168316-95-8	2
Propylene glycol	57-55-6	20
Trimethylnonanol Polyethylene Glycol	60828-78-6	10
Lactic acid	50-21-5	0.5

Composition comments Spinosad is a mixture of the following components: Spinosyn A (CAS# 131929-63-0) and Spinosyn D (CAS# 131920-60-7). Remaining components of this product are non-hazardous and/or are present at concentrations below reportable levels.

4. First-aid measures

Description of necessary first aid measures

Inhalation Move to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, provide artificial respiration assistance (mouth-to-mouth) and call a physician immediately.

Skin contact Wash off with soap and plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists.

Eye contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.

Ingestion If conscious, give the victim plenty of water to drink. Never give anything by mouth to a victim who is unconscious or is having convulsions. Call a physician or poison control centre immediately.

Personal protection for first-aid responders In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Symptoms caused by exposure Causes serious eye irritation.

Medical attention and special treatment Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Water. Carbon dioxide (CO₂). Dry chemicals.

Unsuitable extinguishing media Not available.

Specific hazards arising from the chemical Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for fire fighters Wear self-contained breathing apparatus and protective clothing.

Hazchem Code 3Z

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid contact with skin, eyes and clothing. Wear suitable protective clothing, gloves and eye/face protection. See Section 8 for personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

For emergency responders Use personal protection recommended in Section 8 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground. Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes.

Methods and materials for containment and cleaning up

Small Spillages:
Use absorbent/adsorbent material to solidify liquids. Sweep up or vacuum up spillage and collect in suitable container for disposal.

Large Spillages:
Prevent further migration into the environment. Use absorbent/adsorbent material to solidify liquids. Remove sources of ignition. Local authorities should be advised if significant spillages cannot be contained. Large spills due to traffic accidents, etc., should be reported immediately to CHEMWATCH and Elanco Animal Health for assistance.

Other issues relating to spills and releases

Clean up in accordance with all applicable regulations.

7. Handling and storage**Precautions for safe handling**

Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Keep away from heat and sources of ignition. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames and high temperatures. Avoid contact with oxidising agents. Do not store in open or unlabelled containers.
Storage temperature: between 10 °C (50 °F) and 40 °C (104 °F).

8. Exposure controls and personal protection**Control parameters****Occupational exposure limits****Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)**

Components	Type	Value	Form
Propylene glycol (CAS 57-55-6)	TWA	474 mg/m3	Total vapour and particulates.
		10 mg/m3	Particulate.
		150 ppm	Total vapour and particulates.

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
Propylene glycol (CAS 57-55-6)	TWA	474 mg/m3	Total vapour and particulates.
		10 mg/m3	Particulate.
		150 ppm	Total vapour and particulates.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Propylene glycol (CAS 57-55-6)	TWA	474 mg/m3	Total vapour and particulates.
		10 mg/m3	Particulate.
		150 ppm	Total vapour and particulates.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Supplier: TWA 0.3 mg/m3 (Spinosad)
A Lilly exposure guideline has not been established. The above exposure guideline has been established by the supplier.

Appropriate engineering controls

Use appropriate control measures such as fume hood, ventilated enclosure, local exhaust ventilation, or down-draft booth.

Individual protection measures, for example personal protective equipment (PPE)**Eye/face protection**

Wear goggles/face shield. (AS/NZS 1337)

Skin protection**Hand protection**

Chemical resistant gloves. (AS 2161)

Other

Chemical-resistant gloves and impermeable body covering to minimize skin contact.

Respiratory protection

Select appropriate respirator for physical characteristics of material. Select respirator with appropriate protection factor. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the respirator. (AS/NZS 1715)

Thermal hazards	Not available.
Hygiene measures	Use good industrial hygiene practices in handling this material. In a manufacturing setting, wear chemical-resistant gloves and body covering to minimize skin contact. If handled in a ventilated enclosure, as in a laboratory setting, respirator and goggles or face shield may not be required. Safety glasses are always required. When mixing and handling, use protective clothing, impervious gloves, and dust respirator (recommended). Operators should wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse with plenty of water. Under normal use and handling conditions, wear goggles to protect eyes and wear impermeable gloves and protective equipment to avoid direct contact with skin. Wash thoroughly with soap and water after handling.

9. Physical and chemical properties

Appearance	Clear. low viscosity liquid
Physical state	Liquid.
Form	Liquid.
Colour	Blue
Odour	Earthy
Odour threshold	Not available.
pH	4 - 4.1
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 62.0 °C (> 143.6 °F) Pensky-Martens Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other physical and chemical parameters	
Explosive properties	Not explosive
Oxidising properties	The substance or mixture is not classified as oxidizing.
Specific gravity	1.023

10. Stability and reactivity

Reactivity	Not water reactive.
Chemical stability	Material is stable under normal conditions.

Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	None known.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	Fire or excessive heat may produce hazardous decomposition products.

11. Toxicological information

Acute toxicity Based on available data, the classification criteria are not met.

Product	Species	Test results
Elanco AH0493 Extinosad Pour-On for Sheep		
Acute		
Dermal		
<i>Liquid</i>		
LD50	Rabbit	> 1000 mg/kg
Oral		
<i>Liquid</i>		
LD50	Rat	> 5000 mg/kg
Components	Species	Test results

Lactic acid (CAS 50-21-5)

Acute

Dermal

LD50

Rabbit

> 2000 mg/kg No Mortality

Inhalation

LC50

Rat

> 7.94 mg/l, 4 h

Oral

LD50

Rat

3543 - 4936 mg/kg

Propylene glycol (CAS 57-55-6)

Acute

Dermal

LD50

Rabbit

22 g/kg

Oral

LD50

Rat

20.8 g/kg

Spinosad (CAS 168316-95-8)

Acute

Dermal

LD

Rabbit

> 5000 mg/kg

Inhalation

LC50

Rat

> 5180 mg/m³, 4 hours

Oral

LD50

Rat

> 2000 mg/kg

Trimethylnonanol Polyethylene Glycol (CAS 60828-78-6)

Acute

Dermal

LD50

Rabbit

8874 mg/kg

Oral

LD50

Rat

3300 mg/kg

Skin corrosion/irritation Rabbit: No irritation
Based on available data, the classification criteria are not met.

Serious eye damage/irritation Rabbit: Severe eye irritation.

Respiratory or skin sensitisation

Respiratory sensitisation Due to lack of data the classification is not possible.

Skin sensitisation	Guinea pig: Did not cause sensitization on laboratory animals. Based on available data, the classification criteria are not met.
Germ cell mutagenicity	In vitro and in vivo tests did not show mutagenic effects. (Spinosad) (Propylene Glycol) (Polydimethylsiloxane) Based on available data, the classification criteria are not met.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. No effects identified in animal studies. (Spinosad) (Propylene Glycol) Based on available data, the classification criteria are not met.
Reproductive toxicity	In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. (Spinosad) No effects identified in animal studies. (Propylene Glycol) Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Due to lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	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. (Spinosad) Based on available data, the classification criteria are not met.
Aspiration hazard	Due to lack of data the classification is not possible.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test results
Lactic acid (CAS 50-21-5)			
<i>Acute</i>			
Other	EC50	Selenastrum capricornutum (new name Pseudokirchnerella subca	3500 mg/l, 72 h
<i>Chronic</i>			
Other	NOEC	Selenastrum capricornutum (new name Pseudokirchnerella subca	1900 mg/l, 72 h
Aquatic			
<i>Acute</i>			
Fish	LC50	Oncorhynchus mykiss	130 mg/l, 96 h
<i>Chronic</i>			
Fish	LOEC	Fish	2.18 mg/l, 90 d
Propylene glycol (CAS 57-55-6)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	43500 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	51600 mg/l, 96 hours
Spinosad (CAS 168316-95-8)			
	ErC50	Navicula pelliculosa	0.079 mg/l, 120 h (static)
	NOEC	Navicula pelliculosa	0.036 mg/l
Aquatic			
Algae	NOEC	Duckweed (Lemna minor)	1.4 mg/l
Crustacea	EC50	Daphnia	7.37 mg/l, 48 h
		Water flea (Daphnia magna)	> 1 mg/l, 48 h (static)
	NOEC	Water flea (Daphnia magna)	0.0012 mg/l, 21 days (flow through)
Fish	LC50	Carp (Cyprinus carpio)	4.5 mg/l, 96 h (flow through)
	NOEC	Oncorhynchus mykiss	0.5 mg/l Early life-stage (flow through)

Components	Species	Test results	
Trimethylnonanol Polyethylene Glycol (CAS 60828-78-6)			
Aquatic			
<i>Acute</i>			
Crustacea	LC50	Daphnia magna	81.2 mg/l, 48 h
Fish	LC50	Fish	39 mg/l, 96 h
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available on bioaccumulation.		
Partition coefficient			
n-octanol / water (log Kow)			
Lactic acid			-0.72
Propylene glycol			-0.92
Mobility in soil	Not available.		
Other adverse effects	Highly Toxic to honey bees, oysters and diatoms. Moderately toxic to fish and aquatic invertebrates. No more than slightly to practically non-toxic to birds. Practically non-toxic to green algae. No volatility expected. Does not bioconcentrate in aquatic organisms. Not persistent due to photolysis and biodegradation. (Spinosad)		

13. Disposal considerations

Disposal instructions Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information

General information Effective January 1, 2015 by Special Provision, UN3077 and UN3082 when packaged in inner packages of 5L / 5 KG or less are not subject to the dangerous goods regulations.

ADG

UN number 3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (SPINOSAD)
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Environmental hazards Yes
Hazchem Code •3Z
Special precautions for user Not available.
 Not classified as dangerous goods when transported by road or rail in packaging or receptacles not exceeding 500 kg (L) according to ADG 7 SP AU01.

RID

UN number 3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Spinosad)
Transport hazard class(es)
Class 9
Subsidiary risk -
Label(s) 9
Packing group III
Environmental hazards Yes
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number 3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Spinosad)
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Environmental hazards Yes
ERG Code 9L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

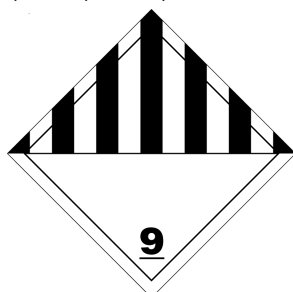
Other information

Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

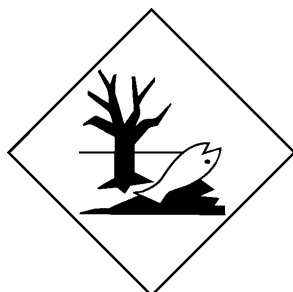
IMDG

UN number 3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Spinosad)
Transport hazard class(es)
Class 9
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant Yes
EmS F-A, S-F
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

ADG; IATA; IMDG; RID



Marine pollutant



15. Regulatory information

Safety, health and environmental regulations

National regulations APVMA approval number 60117

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Propylene glycol (CAS 57-55-6)

Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 10

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)

Propylene glycol (CAS 57-55-6)

10000 - 99999 TONNES See the regulation for additional information.

Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 24-September-2015
Revision date 23-August-2017
Key abbreviations or acronyms used TWA: Time Weighted Average

Disclaimer

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 MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANTABILITY 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:
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Revision information This document has undergone significant changes and should be reviewed in its entirety.