

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

078826164

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

078826123 078826131 078826149 078826156 078849329 078849337 078849345 078849352 078849360 078905662

078905663 078926185 078926186 078926187 078926188 078926189



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Trifexis

**Other means of identification**  
**Item Code** CA4337, CA4339, CA4341, CA4342, CA4344, CA4332, CA4333, CA4334, CA4335, CA4336

**Recommended use** Veterinary Pharmaceutical

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**  
**Company Name** Elanco Animal Health  
2500 Innovation Way  
Greenfield, IN 46140  
US

**Phone:** 1-877-Elanco1 (1-877-352-6261)

**Emergency Telephone:** Elanco Product Technical Support / Human or Animal Exposure Reporting:  
1-888-545-5973

**Email:** elanco\_sds@elanco.com

**Transportation Emergency Telephone:** CHEMTREC: 1-800-424-9300  
(Outside U.S. 1-703-527-3887)

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**  
**Hazard symbol** None.  
**Signal word** None.  
**Hazard statement** The mixture does not meet the criteria for classification.  
**Precautionary statement**  
**Prevention** Not available.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Spinosad		168316-95-8	59
Milbemycin A4 5-oxime		93074-04-5	0.7
Milbemycin A3 5-oxime		114177-14-9	0.2

**Composition comments** Remaining components of this product are non-hazardous and/or are present at concentrations below reportable levels.

Spinosad is a mixture of the following components: Spinosyn A (CAS# 131929-63-0) and Spinosyn D (CAS# 131920-60-7).

## 4. First-aid measures

<b>Inhalation</b>	If crushed and exposure to content occurs: Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician for specific advice.
<b>Skin contact</b>	Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
<b>Eye contact</b>	If crushed and exposure to content occurs: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
<b>Ingestion</b>	Give several glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Call a physician or poison control center immediately.
<b>Most important symptoms/effects, acute and delayed</b>	None known.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water. Carbon dioxide (CO <sub>2</sub> ). Dry chemical.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Fire or excessive heat may produce hazardous decomposition products.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained breathing apparatus and protective clothing.
<b>General fire hazards</b>	Dust may form explosive mixture with air.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear suitable protective clothing, gloves and eye/face protection. Avoid inhalation of dust. See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Vacuum material with appropriate dust collection filter in place. If vacuum is not available, lightly mist/wet material and remove by mopping or wet wiping. Be aware of potential for dust explosion when using electrical equipment. Large spills due to traffic accidents, etc., should be reported immediately to CHEMTREC and Elanco Animal Health for assistance.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes.

## 7. Handling and storage

<b>Precautions for safe handling</b>	NOT INTENDED FOR HUMAN USE. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wear personal protective equipment. Wash hands thoroughly after handling.
<b>Conditions for safe storage, including any incompatibilities</b>	Storage temperature: between 20 and 25 C (68 to 77 F). Excursions permitted from 15 to 30 C (59 to 86 F).

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	Supplier: TWA 0.3 mg/m <sup>3</sup> (Spinosad) A Lilly exposure guideline has not been established. The above exposure guideline has been established by the supplier.
<b>Appropriate engineering controls</b>	Laboratory fume hood or local exhaust ventilation.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Chemical resistant gloves.
<b>Other</b>	Chemical-resistant gloves and impermeable body covering to minimize skin contact.
<b>Respiratory protection</b>	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the respirator. Use an approved respirator. Select appropriate respirator for physical characteristics of material. Select respirator with appropriate protection factor.
<b>Thermal hazards</b>	Not available.

## General hygiene considerations

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.

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

Physical state	Solid.
Form	Tablet.
Color	Tan
Odor	Musty
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	No test data available.

### 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.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	The substance or mixture is not classified as oxidizing.

## 10. Stability and reactivity

Reactivity	Not water reactive.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Fire or excessive heat may produce hazardous decomposition products.

## 11. Toxicological information

### Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.	
Components	Species	Test Results
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
Skin corrosion/irritation	Rabbit: No irritation. (Spinosad) Based on available data, the classification criteria are not met.	
Serious eye damage/eye irritation	Rabbit: Slight irritation. (Spinosad) Based on available data, the classification criteria are not met.	
Respiratory or skin sensitization		
Respiratory sensitization	Due to lack of data the classification is not possible.	
Skin sensitization	Guinea pig: Not a skin sensitizer. (Spinosad) Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	Result in genetic toxicity assays (in vitro and in vivo): Negative (Spinosad) Based on available data, the classification criteria are not met.	
Carcinogenicity	Animal testing did not show any carcinogenic effects. (Spinosad) Based on available data, the classification criteria are not met.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not listed.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
Not regulated.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Not listed.		
Reproductive toxicity	In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. (Spinosad) 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	No aspiration toxicity classification (spinosad)	

## 12. Ecological information

Ecotoxicity		Very toxic to aquatic life with long lasting effects.	
Components		Species	Test Results
Milbemycin A3 5-oxime (CAS 114177-14-9)			
Aquatic			
Acute			
Fish	LC50	Carp (Cyprinus carpio)	0.059 mg/l, 48 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 thorough)

Components	Species		Test Results
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)
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available for this product.		
Bioconcentration factor (BCF)			
Spinosad	< 500		
Mobility in soil	No data available.		
Other adverse effects	Not available.		

### 13. Disposal considerations

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

### 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.

#### DOT

Not regulated as dangerous goods.

#### IATA

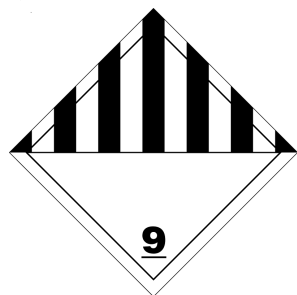
**UN number** UN3077  
**UN proper shipping name** Environmentally hazardous substance, solid, n.o.s. (Spinosad, Milbemycin Oxime)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards** Yes  
**ERG Code** 9L  
**Special precautions for user** Not available.  
**Other information**  
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.

#### IMDG

**UN number** UN3077  
**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (SPINOSAD, MILBEMYCIN OXIME)  
**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** Not available.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not available.

#### IATA; IMDG





## 15. Regulatory information

### US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### Toxic Substances Control Act (TSCA)

##### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
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, including date of preparation or last revision

Issue date	09-17-2014
Revision date	03-29-2019
Version #	03
List of abbreviations	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 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:

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