SAFETY DATA SHEETS

This SDS packet was issued with item:

078912598

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

078782446 078782453

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078912597

Elanco

SAFETY DATA SHEET

1. Identification

Product identifier Surolan

Other means of identification

CA0813 **Item Code**

1H-Imidazole, 1-[2-(2,4-dichlorophenyl)-2-[(2,4-dichlorophenyl)meth **Synonyms**

oxy]ethyl]-, mononitrate

Recommended use Veterinary Pharmaceutical

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name Elanco Animal Health

2500 Innovation Way Greenfield, IN 46140

US

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

Email: lilly_msds@lilly.com

Emergency Telephone Elanco Product Technical Support / Human or Animal Exposure Reporting:

Numbers: 1-888-545-5973

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 Category 2 Germ cell mutagenicity

> Reproductive toxicity Category 2

OSHA defined hazards Not classified.

Label elements



Signal word

Hazard statement

H341 Suspected of causing genetic defects.

Suspected of damaging fertility or the unborn child. H361

Precautionary statement

Prevention

Obtain special instructions before use. P201

Do not handle until all safety precautions have been read and understood. P202

Use personal protective equipment as required. P281

Response

IF exposed or concerned: Get medical advice/attention. P308 + P313

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Material name: Surolan SDS US 1/8

417 Version #: 01 Issue date: 03-31-2015

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%	
Miconazole nitrate	1H-Imidazole, 1-[2-(2,4-dichlorophenyl)-2-[(2,4-dichlorophenyl)methoxy]ethyl]-, mononitrate	22832-87-7	2.3	
Colloidal anhydrous silica		7631-86-9	0.75	
Prednisolone acetate		52-21-1	0.5	
Other components below reportable levels			96.45	

4. First-aid measures

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Call a physician or poison control center

immediately.

Wash off immediately with soap and plenty of water while removing all contaminated clothes and Skin contact

shoes. 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 if irritation develops and persists.

Call a physician or poison control center immediately. Rinse mouth. Never give anything by mouth Ingestion

to a victim who is unconscious or is having convulsions.

Most important

symptoms/effects, acute and

delayed

May cause adverse reproductive effects - such as birth defects, miscarriages, or infertility based on

animal data.

Indication of immediate medical attention and special

treatment needed

Treat symptomatically.

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label

where possible). IF exposed or concerned: Get medical advice/attention.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Foam. Carbon dioxide (CO2). Water. Sand.

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for

firefighters

Fire fighting

equipment/instructions

Wear self-contained breathing apparatus and protective clothing.

Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted. **General fire hazards**

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Prevent further migration into the environment. Use absorbent/adsorbent material to solidify liquids. Collect in a non-combustible container for prompt disposal. Clean surface thoroughly to remove residual contamination.

Large spills due to traffic accidents, etc., should be reported immediately to CHEMTREC and Elanco

Animal Health for assistance.

Environmental precautions Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment.

Material name: Surolan SDS US 2/8 417 Version #: 01 Issue date: 03-31-2015

7. Handling and storage

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Wash hands thoroughly after handling. Avoid breathing

dust/fume/gas/mist/vapors/spray.

Conditions for safe storage,

including any incompatibilities Do not store in open or unlabelled containers. Store locked up.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-3 (29 CFR 1910.1000)

Value Components **Type** 0.8 mg/m3 **TWA** Colloidal anhydrous silica (CAS 7631-86-9) 20 mppcf **US. NIOSH: Pocket Guide to Chemical Hazards** Components Value **Type**

Colloidal anhydrous silica **TWA** 6 mg/m3 (CAS 7631-86-9)

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

Exposure guidelines Supplier: 0.75 mg/m3 TWA (Miconazole Nitrate)

A Lilly exposure guideline has not been established. The above exposure guideline has been

established by the supplier.

Appropriate engineering

controls

Open handling is not recommended. Use appropriate control measures such as fume hood,

ventilated enclosure, local exhaust ventilation, or down-draft booth.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear goggles/face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

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

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator with a full face **Respiratory protection**

> mask. **ABEK** P3

Thermal hazards Not applicable.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid. Suspension.

Color White Odor Odorless

Odor threshold No data available. No data available. Melting point/freezing point No data available. Initial boiling point and No data available.

boiling range

Flash point No data available. **Evaporation rate** No data available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower No data available.

(%)

Flammability limit -

upper (%)

No data available.

Explosive limit - lower

(%)

No data available.

Explosive limit - upper

(%)

No data available.

Vapor pressure No data available. No data available. Vapor density No data available. Relative density

Solubility(ies)

Solubility (water) No data available. **Partition coefficient** No data available. (n-octanol/water)

Auto-ignition temperature No data available. **Decomposition temperature** No data available. No data available. **Viscosity**

Other information

Density No data available. **Dissociation constant** No data available. Drop point No data available. No data available. **Explosive limit Explosive properties** Not explosive **Explosivity** No data available. Flame extension No data available. Flame projection No data available. **Flammability** No data available. Flammability (flash back) No data available.

Oxidizing properties The substance or mixture is not classified as oxidizing.

Potential for dust

explosion

No data available.

VOC (Weight %) No data available.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

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.

Test Results Components **Species**

Colloidal anhydrous silica (CAS 7631-86-9)

Acute **Dermal**

LD50 Rabbit > 5000 mg/kg

Components	Species	Test Results	
Inhalation			
Dust			
LC50	Rat	> 58.8 mg/l, 4 hours	
Oral			
LD50	Rat	> 5000 mg/kg	
Miconazole nitrate (CAS 22832-8	37-7)		
<u>Acute</u>			
Oral			
LD	Rat	> 640 mg/kg	
LD50	Dog	> 160 mg/kg	
	Guinea pig	> 275.9 mg/kg	
	Mouse	> 578.1 mg/kg	
	Rat	920 mg/kg	
		550 mg/kg	
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.		
Serious eye damage/eye irritation	Due to partial or complete lack of data the classification is not possible.		

Respiratory or skin sensitization

Respiratory sensitization Due to partial or complete lack of data the classification is not possible. **Skin sensitization** Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity Suspected of causing genetic defects.

Induced chromosome aberrations in vivo. (Miconazole Nitrate)

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Colloidal anhydrous silica (CAS 7631-86-9)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityOral studies in rats and rabbits given up to 100 mg/kg during gestation did not produce teratogenic effects in offspring. Significant prolonged gestation was observed in rats orally given more than 30 mg/kg/day. Increased fetal resorption observed in rabbits given 100 mg//kg/day along with decreased maternal body weight.

Specific target organ toxicity

- single exposure

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity

- repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard No aspiration toxicity classification

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Colloidal anhydrous sil	ica (CAS 7631-86-9))	
Aquatic			
<i>Acute</i> Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 24 hours
Fish	LCL0	Zebra danio (Danio rerio)	10000 mg/l, 96 hours
Miconazole nitrate (CA	S 22832-87-7)		-
Other	EC50	Activated sludge of a predominantly domestic sewage	> 1 mg/l, 3 h
Chronic			
Other	NOEC	Activated sludge of a predominantly domestic sewage	>= 1 mg/l, 3 h

Material name: Surolan SDS US

417 Version #: 01 Issue date: 03-31-2015

5/8

Components		Species	Test Results
Aquatic			
Crustacea	NOEC	Daphnia	0.045 mg/l
Acute			
Algae	EC50	Freshwater algae	0.03 mg/l Growth inhibition.
			0.019 mg/I Cell multiplication.
			0.01 mg/l Growth inhibition. (Scenedesmus capricornutum)
Crustacea	EC50	Daphnia	0.119 mg/l
Fish	EC50	Zebra danio (Danio rerio)	0.144 mg/l
Chronic			
Algae	NOEC	Freshwater algae	0.01 mg/l
			0.001 mg/l
Fish	LOEC	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.44 mg/l, 28 d
		Zebra danio (Danio rerio)	0.036 mg/l, 21 d
	NOEC	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.02 mg/l, 28 d
		Zebra danio (Danio rerio)	0.028 mg/l
			0.012 mg/l, 21 d

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)

Miconazole nitrate 3.4 Test method not available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

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.

DOT

Not regulated as dangerous goods.

IATA

UN number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Miconazole nitrate)

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.

Cargo aircraft only

Allowed.

IMDG

UN number UN3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Miconazole nitrate)

Transport hazard class(es)

Class 9
Subsidiary risk Packing group III
Environmental hazards

Marine pollutant Yes
EmS F-A, S-F

Special precautions for Read safety instructions, SDS and emergency procedures before handling.

user

Transport in bulk according to Not established.

Annex II of MARPOL 73/78

and the IBC Code

IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,

29 CFR 1910.1200.

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 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

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.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed

US. Massachusetts RTK - Substance List

Colloidal anhydrous silica (CAS 7631-86-9)

US. New Jersey Worker and Community Right-to-Know Act

Colloidal anhydrous silica (CAS 7631-86-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Colloidal anhydrous silica (CAS 7631-86-9)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region **Inventory name** On inventory (yes/no)* Canada Domestic Substances List (DSL) Yes Canada Non-Domestic Substances List (NDSL) No United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory No

16. Other information, including date of preparation or last revision

Issue date 03-31-2015

Version # 01

Lilly Lab Code Health: 1

> Fire: 1 Reactivity: 0

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 MATERIAL 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

Revision Information Product and Company Identification: Product Codes

> Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data

Ecological Information: Ecotoxicity

Transport Information: Proper Shipping Name/Packing Group

Regulatory Information: Risk Phrases - Labeling

GHS: Classification

^{*}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).

Issue date: 29-September-2015 Version number: 01



SAFETY DATA SHEET

1. Identification

Product identifier Surolan Suspension for Otitis Externa and Skin Infections in Dogs and Cats

Other means of identification

Synonyms 1H-Imidazole, 1-[2-(2,4-dichlorophenyl)-2-[(2,4-dichlorophenyl)meth

oxy]ethyl]-, mononitrate

Item Code CA0813

Recommended use of the chemical and restrictions on use

Recommended use Veterinary Pharmaceutical

Restrictions on use Not available.

Details of manufacturer or importer

Manufacturer

Company name Elanco Animal Health

A Division of Eli Lilly Australia Pty Ltd

Address A.B.N. 39 000 233 992

112 Wharf Road, West Ryde, N.S.W. 2114, Australia

 Telephone
 (02) 9878 7777

 Fax
 (02) 9878 7720

 e-mail
 lilly_msds@lilly.com

Emergency phone Elanco Animal Health: 1800 226 324 (Toll free)

number OR Poisons Information Centre: 131126 (Australia-wide)

24 hr emergency contact CHEMWATCH 1800 039 008 (spills and accidents)

number

24 hr emergency contact CHEMWATCH +61 2 9186 1132 (spills and accidents)

number (Local)

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards Not classified.

Health hazards Germ cell mutagenicity Category 2 **Environmental hazards** Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

Label elements, including precautionary statements

Hazard symbol(s)



Health hazard Environment

Signal word Warning

Hazard Statement(s) Suspected of causing genetic defects. Toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Use personal protective equipment as required.

Response IF exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

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
Miconazole nitrate	22832-87-7	2.3
1H-Imidazole, 1-[2-(2,4-dichlorophenyl)-2-[(2,4-dichlorophenyl)methoxy]ethyl]-, mononitrate		
Prednisolone acetate	52-21-1	0.5
Other components below reportable levels		97.2

4. First-aid measures

Description of necessary first aid measures

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Call a physician or poison control centre

immediately.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and

shoes. 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 if irritation develops and persists.

In the case of accident or if you feel unwell, seek medical advice immediately (show the label

May cause adverse reproductive effects - such as birth defects, miscarriages, or infertility based on

Call a physician or poison control centre immediately. Rinse mouth. Never give anything by mouth Ingestion

where possible). IF exposed or concerned: Get medical advice/attention.

to a victim who is unconscious or is having convulsions.

Personal protection for

first-aid responders

Symptoms caused by

exposure

Medical attention and special

treatment

animal data.

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Foam. Carbon dioxide (CO2). Water. Sand.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

Wear self-contained breathing apparatus and protective clothing.

Fire or excessive heat may produce hazardous decomposition products.

Specific hazards arising from

the chemical

Special protective equipment and precautions for fire

fighters Fire fighting

Move containers from fire area if you can do so without risk.

equipment/instructions

Hazchem Code 37

General fire hazards No unusual fire or explosion hazards noted.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during

personnel clean-up. For personal protection, see section 8.

For emergency Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

responders

Environmental precautions Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment. Methods and materials for containment and cleaning up

Prevent further migration into the environment. Use absorbent/adsorbent material to solidify liquids. Collect in a non-combustible container for prompt disposal. Clean surface thoroughly to

remove residual contamination.

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 Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Wash hands thoroughly after handling. Avoid breathing

dust/fume/gas/mist/vapours/spray.

Conditions for safe storage,

including any incompatibilities

Do not store in open or unlabelled containers. Store locked up.

8. Exposure controls and personal protection

Control parameters Supplier: 0.75 mg/m3 TWA (Miconazole Nitrate)

A Lilly exposure guideline has not been established. The above exposure guideline has been

established by the supplier.

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit valuesNo biological exposure limits noted for the ingredient(s). **Exposure guidelines**Supplier: 0.75 mg/m3 TWA (Miconazole Nitrate)

A Lilly exposure guideline has not been established. The above exposure guideline has been

established by the supplier.

Appropriate engineering

controls

Open handling is not recommended. 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 Wear appropriate chemical resistant gloves. (AS 2161)

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

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Respirator with a full face

mask. ABEK P3

(AS/NZS 1715) **Thermal hazards** Not applicable.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid. Suspension.

Colour White **Odour**less.

Odour threshold
 pH
 Mo data available.
 Melting point/freezing point
 No data available.
 Initial boiling point and
 No data available.

boiling range

Flash point

Evaporation rate

No data available.

No data available.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower No data available.

(%)

Flammability limit -

upper (%)

No data available.

Explosive limit - lower

(%)

No data available.

Explosive limit – upper

(%)

No data available.

Vapour pressureNo data available.Vapour densityNo data available.Relative densityNo data available.

Solubility(ies)

Solubility (water) No data available.

Partition coefficient No data available.

(n-octanol/water)

Auto-ignition temperatureNo data available.Decomposition temperatureNo data available.ViscosityNo data available.

Other physical and chemical parameters

Density No data available. No data available. **Dissociation constant** No data available. **Dropping point Explosive limit** No data available. **Explosive properties** Not explosive **Explosivity** No data available. Flame extension No data available. Flame projection No data available. **Flammability** No data available. Flammability (flash back) No data available.

Oxidising properties The substance or mixture is not classified as oxidizing.

Potential for dust

explosion

No data available.

VOC (Weight %)No data available.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

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.

Components	Species	Test results	
Miconazole nitrate (CAS 22832-87-	7)		
<u>Acute</u>			
Oral			
LD	Rat	> 640 mg/kg	
LD50	Dog	> 160 mg/kg	
	Guinea pig	> 275.9 mg/kg	
	Mouse	> 578.1 mg/kg	
	Rat	920 mg/kg	
		550 mg/kg	
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.		
Serious eye damage/irritation	Due to partial or complete lack of data the classification is not possible.		
Respiratory or skin sensitisation	on		
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.		
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.		
Germ cell mutagenicity	Suspected of causing genetic defects. Induced chromosome aberrations in vivo. (Miconazole Nitrate)		
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.		
Reproductive toxicity	Oral studies in rats and rabbits given up to 100 mg/kg during gestation did not produce teratogenic effects in offspring. Significant prolonged gestation was observed in rats orally given more than 30 mg/kg/day. Increased fetal resorption observed in rabbits given 100 mg//kg/day along with decreased maternal body weight. Based on available data, the classification criteria are not met.		
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classificat	ion is not possible.	
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classificat	ion is not possible.	

12. Ecological information

Aspiration hazard

Ecotoxicity	Toxic to aquatic life with long lasting effects.
-------------	--

No aspiration toxicity classification

Toxic to aquatic file with long lasting chects.				
Components		Species	Test results	
Miconazole nitrate (CAS 22	2832-87-7)			
Other	EC50	Activated sludge of a predominantly domestic sewage	> 1 mg/l, 3 h	
Chronic				
Other	NOEC	Activated sludge of a predominantly domestic sewage	>= 1 mg/l, 3 h	
Aquatic				
Crustacea	NOEC	Daphnia	0.045 mg/l	
Acute				
Algae	EC50	Freshwater algae	0.03 mg/l Growth inhibition.	
			0.019 mg/l Cell multiplication.	
			0.01 mg/l Growth inhibition. (Scenedesmus capricornutum)	
Crustacea	EC50	Daphnia	0.119 mg/l	
Fish	EC50	Zebra danio (Danio rerio)	0.144 mg/l	
Chronic				
Algae	NOEC	Freshwater algae	0.01 mg/l	
			0.001 mg/l	

Components		Species	Test results	
Fish	LOEC	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.44 mg/l, 28 d	
		Zebra danio (Danio rerio)	0.036 mg/l, 21 d	
	NOEC	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	0.02 mg/l, 28 d	
		Zebra danio (Danio rerio)	0.028 mg/l	
			0.012 mg/l, 21 d	

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)

Miconazole nitrate 3.4 Test method not available.

Mobility in soil No data available for this product.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods 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

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Miconazole nitrate)

Transport hazard class(es)

9 Class **Subsidiary risk** Packing group III **Environmental hazards** Yes **Hazchem Code** •37

Special precautions for Read safety instructions, SDS and emergency procedures before handling.

user

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. (Miconazole nitrate)

Transport hazard class(es)

Class 9 **Subsidiary risk** Label(s) 9 III **Packing group Environmental hazards** Yes

Special precautions for Read safety instructions, SDS and emergency procedures before handling.

user **IATA**

> **UN number** 3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Miconazole nitrate)

Transport hazard class(es)

9 Class Subsidiary risk Packing group III **Environmental hazards**

ERG Code 9L

Special precautions for

user

Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only

Allowed.

IMDG

UN number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Miconazole nitrate)

Transport hazard class(es)

Class 9
Subsidiary risk Packing group III
Environmental hazards

Marine pollutant Yes EmS F-A, S-F

Special precautions for Read s

user

Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Not established. Annex II of MARPOL 73/78

Annex II of MARPOL 73/78 and the IBC Code

ADG; IATA; IMDG; RID



Marine pollutant



15. Regulatory information

Safety, health and environmental regulations

National regulations APVMA approval number 46427

Poison Schedule 4

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix C

Poisons schedule number not allocated.

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 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)

Not listed.

Importation of Ozone Deleting 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.

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

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

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

Country(s)	or region	inventory name	On inventory (yes/no)*
Australia		Australian Inventory of Chemical Substances (AICS)	Yes
Canada		Domestic Substances List (DSL)	Yes
Canada		Non-Domestic Substances List (NDSL)	No
China		Inventory of Existing Chemical Substances in China (IECSC)	No
Europe		European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
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	I	New Zealand Inventory	Yes
Philippines		Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States	s & 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 29-September-2015

Key abbreviations or acronyms used

TWA: Time Weighted Average

Inventory name

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 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

Revision Information Product and Company Identification: Alternate Trade Names

GHS: Classification

9/9

On inventory (yes/ne)*