SAFETY DATA SHEETS

This SDS packet was issued with item:

078558848

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

078599810

Product Name: Percorten-V[®] Injection for Dogs

Page No: 1 of 4

Date of issue: November 2008



MATERIAL SAFETY DATA SHEET

Section 1 - Identification of Chemical Product and Company

COMPANY DETAILS:

Novartis Animal Health Australasia Pty Limited Phone: (02) 9805 3555 A.C.N. 076 745 198 Fax: (02) 9888 8387

54 Waterloo Road North Ryde NSW 2113

Product Name: Percorten-V[®] Injection for Dogs

Active Ingredients: Deoxycortone Pivalate

Product Use: For use as replacement therapy for the mineralocorticoid deficit in dogs

with primary adrenocortical insufficiency

Revision Date: November 2008

Section 2 Hazards Identification

Hazard classification: Hazardous Substance

Non-Dangerous Goods

Risk Phrases: None
Safety Phrases: None
SUSDP Classification: 4

UN Number: None Allocated

Section 3 Composition / Information on Ingredients

Ingredients	CAS No.	Content (%w/v)
Deoxycortone Pivalate	[808-48-0]	2.5
Thimerosal	[54-64-8]	0.002
Other ingredients determined not to be		<2
hazardous		\ 2
Water	[7732-18-5]	to volume

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

Section 4 First Aid Measures

Label regulated First If poisoning occurs contact a Doctor or Poisons Information Centre

Aid Statement: (Phone 131126).

Scheduled poisons : Product is an S₄ scheduled poison. Poisons Information Centres in

each State capital city can provide additional assistance for scheduled

poisons (Phone 131126).

Inhalation: Move affected person to fresh air and keep rested until recovered.

Skin Contact: Remove contaminated clothing and wash affected areas thoroughly with

soap and water.

Eye contact: If product gets in eyes, flush with large quantities of clean tap water for

several minutes.

Swallowed: If poisoning occurs contact a Doctor or Poisons Information Centre

(Phone 131126).

Advice to doctor: Note the nature of the product (mineralocorticoid hormone). Product was

previously approved in the USA for use in humans for treatment of

Novartis Animal Health Australasia Pty Ltd

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Product Name: Percorten-V[®] Injection for Dogs

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MATERIAL SAFETY DATA SHEET

Addison's disease. Ingestion of small amounts should not present a problem. However, if a large amount has been ingested (several vials) and emesis in inadequate, lavage stomach. Activated carbon can be given to absorb remaining product. Treat symptomatically together with measures to correct fluid and electrolyte imbalance. In case of hypokalemia, digitalis should be used only with caution

Section 5 Fire Fighting Measures

Extinguishing Media: This product is non-flammable and non-explosive. Use extinguishing

media suited to the materials that are burning such as powder, foam,

carbon dioxide or water-spray.

Fire Fighting: Fight fire in the early stages if safe to do so. Wear respiratory

protection with a full mask and combination filter in ventilated areas. In enclosed premises wear respirator with independent air supply. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat and goggles.

Section 6 Accidental Release Measures

Accidental Release: In case of spillage it is important to take all steps necessary to:

Avoid eye and skin contact. Avoid contamination of surface and ground

water, drainage systems and other waterways.

Procedure for spill:

Keep all bystanders away. Wear goggles, full length clothing and PVC gloves. Reposition any leaking packages so as to minimise leakage. Cover spilled liquid with an absorbent material such as pet litter. Sweep up and place in an approved chemical waste container. Flush the area with water to remove any residue. Avoid contamination of sewers and waterways.

Section 7 Handling and Storage

Safe Handling: Avoid contact with skin, eyes and clothing.

Storage: Keep out of reach of children. Store below 25°C (Air Conditioning) in

original container tightly closed. Store away from direct sunlight and

humidity. Do not freeze.

Section 8 Exposure Controls / Personal Protection

Exposure Limits: No specific exposure standards have been set for this material. The

nuisance particulate exposure standard of 10 mg/m³ of inspirable dust (8 hr time weighted average) should not be exceeded for airborne dust

generated from this material.

Eye Protection: No special protective equipment required.

Skin protection: No special protective equipment required. If contact is possible when

opening containers and using this material, wear PVC gloves.

Respirator: No special protective equipment required.

Protective material types: No special protective equipment required.

General advice: After use and before eating, drinking or smoking, wash hands with soap

and water.

Novartis Animal Health Australasia Pty Ltd

Product Name: Percorten-V[®] Injection for Dogs

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MATERIAL SAFETY DATA SHEET

Section 9 - Physical and Chemical Properties

Physical State: Homogenous suspension

Colour:White/ off-whiteOdour:No particular odourCorrosiveness:Non-corrosiveFlammabilityNon-flammable

pH 5-7

Section 10 - Stability and Reactivity

Chemical Stability: Product is stable under normal conditions.

Section 11 - Toxicological Information

Acute Toxicity: Moderately toxic.

Oral: Based on the acute oral LD_{50} in mice = 1000 mg/kg body weight,

ingestion of 60 ml or more may be fatal to an adult human. However, given that the product is supplied in 4 ml vials, this would require the ingestion of the contents of 15 or more vials. No hazard is therefore

expected from normal clinical use.

Dermal: No hazard is expected from normal clinical use Inhalation: No hazard is expected from normal clinical use

Local Effects: <u>Irritation</u>

Skin: No hazard is expected from normal clinical use Eyes: No hazard is expected from normal clinical use

Sensitisation - Potential Skin Sensitiser - repeated skin contact may cause a

sensitisation (allergic) reaction in sensitive individuals

Section 12 - Ecological Information

No ecological data is available.

Section 13 - Disposal Considerations

After intended use: Dispose of empty vial by wrapping with paper and putting in garbage.

Section 14 - Transport Information

UN Number:

UN proper shipping name:

Class & Subsidiary Risk:

Packaging Group:

HAZCHEM Code:

None allocated

None allocated

None allocated

Section 15 - Regulatory Information

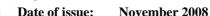
Australia: Product first registered for use in Australia on the 25th September 2005

by the Australian Pesticides and Veterinary Medicines Authority

Novartis Animal Health Australasia Pty Ltd

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MATERIAL SAFETY DATA SHEET

Section 16 - Other Information

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

Acronyms

ADG Code: Australian Code for the Transport of Dangerous Goods by Road

and Rail

AICS: Australian Inventory of Chemical Substances
CAS Number: Chemical Abstracts Service Registry Number

Hazchem Number: Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters

IARC International Agency for Research on Cancer

NOHSC National Occupational Health and Safety Commission

NOS Not otherwise specified

NTP National Toxicology Program (USA)

R-Phrase Risk Phrase

STEL Short-term Exposure Limit

SUSDP Standard for the Uniform Scheduling of Drugs & Poisons

TWA Time Weighted Average UN Number United Nations Number

Note:

This product is a registered veterinary chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

This Material Safety Data Sheet 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 should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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Elanco

SAFETY DATA SHEET

1. Identification

Product identifier Percorten-V Injection for Dogs

Other means of identification

Item Code CA5320

Recommended use Veterinary Product **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 Reproductive toxicity Category 2

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement

H361 Suspected of damaging fertility or the unborn child.

Precautionary statement

Prevention

P201 Obtain special instructions before use.

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

P281 Use personal protective equipment as required.

Response

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

Storage Not available.

Disposal

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

Material name: Percorten-V Injection for Dogs 6290 Version #: 01 Issue date: 05-10-2016

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Deoxycorticosterone Pivalate	PREGN-4-ENE-3,20-DIONE, 21-(2,2-DIMETHYL-1-OXOPROPOXY)-		2.5
THIMEROSAL		54-64-8	0.002

Other components below reportable levels **Composition comments**

4. First-aid measures

Inhalation Remove to fresh air. If breathing stops, provide artificial respiration. Get medical attention

immediately.

Wash off immediately with plenty of water. Continue to rinse for at least 15 minutes. Immediately Skin contact

take off all contaminated clothing. Get medical attention if irritation develops and persists.

Eve 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.

Ingestion Immediately give large quantities of water to drink. Never give anything by mouth to a victim who is

unconscious or is having convulsions. Call a physician immediately.

Most important symptoms/effects, acute and

delayed

Suspected of damaging fertility or the unborn child. None known.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

equipment/instructions

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. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

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. Avoid contact with eyes, skin, and clothing. Do not taste or swallow, Provide adequate ventilation. Observe good industrial hygiene practices. Wear appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

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8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value	
THIMEROSAL (CAS 54-64-8)	STEL	0.03 mg/m3	
	TWA	0.01 mg/m3	
US. OSHA Table Z-2 (29 CFR 19	10.1000)		
Components	Туре	Value	
THIMEROSAL (CAS 54-64-8)	Ceiling	0.04 mg/m3	
	TWA	0.01 mg/m3	
US. NIOSH: Pocket Guide to Ch	emical Hazards		
Components	Туре	Value	
THIMEROSAL (CAS	STEL	0.03 mg/m3	

Biological limit values

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

Exposure guidelines

54-64-8)

US - California OELs: Skin designation

THIMEROSAL (CAS 54-64-8)

Can be absorbed through the skin.

TWA

US - Tennessee OELs: Skin designation

THIMEROSAL (CAS 54-64-8)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

THIMEROSAL (CAS 54-64-8)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

THIMEROSAL (CAS 54-64-8)

Can be absorbed through the skin.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

0.01 mg/m3

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Not available.

Thermal hazards Not available.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash

work clothing and protective equipment to remove contaminants. Observe any medical

surveillance requirements.

9. Physical and chemical properties

Appearance

Physical stateLiquid.FormSuspension.ColorWhite.

Odor Not available.
Odor threshold Not available.

pH 5 - 7

Melting point/freezing point Not available.

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212 °F (100 °C) at 100 kPa Initial boiling point and boiling

range

Not available. Flash point **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.

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

2.37 kPa at 20 C Vapor pressure Not available. Vapor density Not available. Relative density

Solubility(ies)

Soluble. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. Not available. **Viscosity**

Other information

Not explosive. **Explosive properties Oxidizing properties** Not oxidizing.

10. Stability and reactivity

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

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Deoxycorticosterone Pivalate		
<u>Acute</u>		
Oral		
LD50	Mouse	1000 mg/kg
THIMEROSAL (CAS 54-64-8)		
<u>Acute</u>		
Oral		
LD50	Rat	75 mg/kg
Skin corrosion/irritation	Rabbit: Mild skin irritation. (Active ingredient) Based on available data, the classification criteria are not met.	
Serious eye damage/eye irritation	Rabbit: Mild eye irritation. (Active ingredient) Based on available data, the classification criteria are not met.	

Respiratory or skin sensitization

Respiratory sensitization

Skin sensitization

Due to lack of data the classification is not possible.

Due to lack of data the classification is not possible.

Output Due to lack of data the classification is not possible.

No effects identified in animal studies. (Active ingredient)

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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Suspected of damaging fertility or the unborn child. (Active ingredient)

Specific target organ toxicity - single exposure

No significant target organ toxicity reported. (Active ingredient) Based on available data, the classification criteria are not met.

No significant target organ toxicity reported. (Active ingredient)

Specific target organ toxicity - repeated

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

exposure

Aspiration hazard Not applicable.

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

THIMEROSAL (CAS 54-64-8)

Aquatic Acute

Fish LC50 Bullhead, catfish (Ictalurus sp.) 7.5 mg/l, 24 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Deoxycorticosterone Pivalate 4.846, (Calculated)

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.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

Material name: Percorten-V Injection for Dogs 6290 Version #: 01 Issue date: 05-10-2016

15. Regulatory information

US federal regulations

This 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 regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

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

THIMEROSAL (CAS 54-64-8)

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

THIMEROSAL (CAS 54-64-8)

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

THIMEROSAL (CAS 54-64-8)

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

THIMEROSAL (CAS 54-64-8)

US. Rhode Island RTK

THIMEROSAL (CAS 54-64-8)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive

harm.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

THIMEROSAL (CAS 54-64-8) Listed: July 1, 1990

International Inventories

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*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 05-10-2016

Version # 01

Material name: Percorten-V Injection for Dogs 6290 Version #: 01 Issue date: 05-10-2016

No

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 Regulatory Information: Risk Phrases - Class.

GHS: Classification