This SDS packet was issued with item: 078912846

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

078739243 078781107



Revision date: 26-Nov-2013

Version: 2.0

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin

Trade Name: Chemical Family: CattleMaster GOLD FP 5 L5 Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against Intended Use: Veterinary Vaccine

Details of the Supplier of the Safety Data Sheet

Zoetis Inc. 100 Campus Drive, P.O. Box 651 Florham Park, New Jersey 07932 (USA) Rocky Mountain Poison Control Center Phone: 1-866-531-8896 Product Support/Technical Services Phone: 1-800-366-5288

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Contact E-Mail: VMIPSrecords@zoetis.com Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem Belgium

Emergency telephone number: International CHEMTREC (24 hours): +1-703-527-3887

2. HAZARDS IDENTIFICATION

Appearance:	Freeze-dried preparation plus a liquid adjuvanted preparation
Classification of the Substance or M	ixture
GHS - Classification	

Acute Oral Toxicity: Category 5

EU Classification:

EU Indication of danger: Not classified

Label Elements

Signal Word: Hazard Statements:	Warning H303 - May be harmful if swallowed
Precautionary Statements:	P312 - Call a POISON CENTRE/doctor/physician if you feel unwell
Other Hazards Short Term:	In the event of accidental injection, an allergic reaction may occur. If an allergic reaction occurs, the worker should be removed to the nearest emergency room and the appropriate therapy instituted. Saponins have little toxicity for humans when ingested but have hemolytic effects when injected intravenously.
Australian Hazard Classification (NOHSC):	Non-Hazardous Substance. Non-Dangerous Goods.

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin Revision date: 26-Nov-2013

Version: 2.0

Note:

This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	EU EINECS/ELINCS	EU Classification	GHS Classification	%
Quil-A saponin	66594-14-7	List Not Listed	Not Listed	Not Listed	*
Cholesterol	57-88-5	200-353-2	Not Listed	Not Listed	*
Merthiolate (as mercury)	54-64-8	200-210-4	T+; R26/27/28 R33 N; R50/53	Acute Tox. 2 (H330) Acute Tox. 1 (H310) Acute Tox. 2 (H300) STOT RE 2 (H373) Aq. Acute 1 (H400) Aq. Chronic 1 (H410)	##
Gentamicin	1403-66-3	215-765-8	Not Listed	Not Listed	##

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Bovine Parainfluenza3	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Leptospira canicola	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Leptospira grippotyphosa	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Leptospira hardjo	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Leptospira icterohaemorrhagiae	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Leptospira pomona	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Bovine Respiratory Syncytial Virus	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Bovine Rhinotrachetitis	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Bovine Virus Diarrhea	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*

Additional Information:

* Proprietary

Trace

Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

For the full text of the R phrases and CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of First Aid Measures Eye Contact:

Immediately flush eyes with water for at least 15 minutes. If irritation occurs or persists, get medical attention.

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin Revision date: 26-Nov-2013

Version: 2.0

Skin Contact:	Wash skin with soap and water. If irritation occurs or persists, get medical attention.
Ingestion:	Get medical attention. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.
Most Important Symptoms and Effec	ts, Both Acute and Delayed No data available
Symptoms and Effects of Exposure:	
Medical Conditions Aggravated by Exposure:	None known
Indication of the Immediate Medical	Attention and Special Treatment Needed
Notes to Physician:	The viruses contained in this vaccine are generally not considered to cause disease in humans.
	5. FIRE-FIGHTING MEASURES
Extinguishing Media:	As for primary cause of fire.
Special Hazards Arising from the Sul	
Hazardous Combustion Products:	Not known
Fire / Explosion Hazards:	Fine particles (such as dust and mists) may fuel fires/explosions.
Advice for Fire-Fighters Wear approved positive pressure used to fight fire.	e, self-contained breathing apparatus and full protective turn out gear. Dike and collect water
6.	ACCIDENTAL RELEASE MEASURES
Personal Precautions, Protective Equ Personnel involved in clean-up s	uipment and Emergency Procedures hould wear appropriate personal protective equipment (see Section 8). Minimize exposure.
Environmental Precautions Place waste in an appropriately I	abeled, sealed container for disposal. Care should be taken to avoid environmental release.
Methods and Material for Containme	nt and Cleaning Un
Measures for Cleaning / Collecting:	Contain the source of spill if it is safe to do so. Collect spilled material by a method that controls dust generation. A damp cloth or a filtered vacuum should be used to clean spills of dry solids. Clean spill area thoroughly.
Additional Consideration for Large Spills:	Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.
	7. HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat, sparks, and flame. Minimize dust generation. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing dust, vapor or mist. Avoid accidental injection. Use appropriate personal protective equipment.

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin Revision date: 26-Nov-2013 Page 4 of 9

Version: 2.0

 Conditions for Safe Storage, Including any Incompatibilities

 Storage Conditions:
 Store under refrigeration in closed container. Keep container tightly closed when not in use.

 Storage Temperature:
 2-7°C (35 - 45°F)

 Incompatible Materials:
 This material can be denatured or inactivated by a variety of organic solvents, salts or heavy metals.

 Specific end use(s):
 No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Gentamicin

Bulgaria OEL - TWA

0.1 mg/m³

The purpose of the Occupational Exposure Band (OEB) classification system is to separate substances into different Hazard categories when the available data are sufficient to do so, but inadequate to establish an Occupational Exposure Limit (OEL). The OEB given is based upon an analysis of all currently available data; as such, this value may be subject to revision when new information becomes available.

Gentamicin Zoetis OEB	OEB 2 (control exposure to the range of 100ug/m^3 to < 1000ug/m^3)
Exposure Controls	
Engineering Controls:	Engineering controls should be used as the primary means to control exposures. General room ventilation is adequate unless the process generates dust, mist or fumes.
Personal Protective Equipment:	Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).
Hands:	Wear impervious gloves if skin contact is possible.
Eyes:	Wear safety glasses or goggles if eye contact is possible.
Skin:	Wear protective clothing when working with large quantities. Wash hands and arms thoroughly after handling this material.
Respiratory protection:	If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Odor: Molecular Formula:	Freeze-dried preparation plus Liquid No data available. Mixture	Color: Odor Threshold: Molecular Weight:	No data available. No data available. Mixture
Solvent Solubility:	No data available		
Water Solubility:	No data available		
Solubility:	Soluble: Water (based on components)		
pH:	7.0 +/- 1.5		
Melting/Freezing Point (°C):	No data available		
Boiling Point (°C):	>100		
Partition Coefficient: (Method, pH, Er No data available	ndpoint, Value)		
Decomposition Temperature (°C):	No data available.		
Evaporation Rate (Gram/s):	No data available		

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin Revision date: 26-Nov-2013 Page 5 of 9

Version: 2.0

Vapor Pressure (kPa):	No data available
Vapor Density (g/ml):	No data available
Relative Density:	No data available
Specific Gravity:	1.0 +/-0.2
Viscosity:	No data available

.

Flammablity: Autoignition Temperature (Solid) (°C): Flammability (Solids): Flash Point (Liquid) (°C): Upper Explosive Limits (Liquid) (% by Vol.): Lower Explosive Limits (Liquid) (% by Vol.): Polymerization:

No data available Will not occur

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions	No data available Stable
Oxidizing Properties:	No data available
Conditions to Avoid:	Store at 2°-7°C. Prolonged exposure to higher temperatures may adversely affect potency. Do not freeze.
Incompatible Materials:	This material can be denatured or inactivated by a variety of organic solvents, salts or heavy metals.
Hazardous Decomposition Products:	None expected under normal conditions.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects General Information:

Toxicological properties of the formulation have not been investigated. The information included in this section describes the potential hazards of the individual ingredients. The antigens included in this product are non-infectious. All have been prepared from killed or inactivated preparations of microorganisms.

Acute Toxicity: (Species, Route, End Point, Dose)

Merthiolate (as mercury)

Rat Oral LD50 75 mg/kg Rat Subcutaneous LD50 98mg/kg

Gentamicin

Rat Oral LD50 6600 mg/kg Rat Subcutaneous LD50 710mg/kg Mouse IM LD50 167 mg/kg Rat IM LD50 463 mg/kg

Quil-A saponin

Rat IV LD50 670 ug/kg

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin Revision date: 26-Nov-2013 Page 6 of 9

Version: 2.0

11. TOXICOLOGICAL INFORMATION

Irritation / Sensitization: (Study Type, Species, Severity)

Merthiolate (as mercury)

Eye Irritation Rabbit Mild

Gentamicin

Eye IrritationRabbitNon-irritatingSkin Irritation / SensitizationThis product contains merthiolate which is considered to be a skin sensitizer.

Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Gentamicin Embryo / Fetal Development Reproductive Effects	Rat	Intramuscular 75 mg/kg/day LOAEL Developmental toxicity Not considered to be a reproductive hazard.
Carcinogen Status:		None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA. See below
Cholesterol IARC:		Group 3 (Not Classifiable)

12. ECOLOGICAL INFORMATION

Environmental Overview:	The environmental characteristics of this material have not been fully evaluated. This product contains trace quantities of mercury, releases to the environment should be avoided.
Toxicity:	No data available
Persistence and Degradability:	No data available
Bio-accumulative Potential:	No data available
Mobility in Soil:	No data available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:Dispose of waste in accordance with all applicable laws and regulations. This product contains
trace quantities of mercury and may qualify as a RCRA Hazardous Waste. Status should be

confirmed using the EPA Toxicity Characteristic Leaching Procedure (TCLP).

14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin Revision date: 26-Nov-2013 Page 7 of 9

Version: 2.0

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Canada - WHMIS: Classifications

WHMIS hazard class:

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Quil-A saponin CERCLA/SARA 313 Emission reporting California Proposition 65 Australia (AICS): EU EINECS/ELINCS List	Not Listed Not Listed Present Not Listed
Cholesterol CERCLA/SARA 313 Emission reporting California Proposition 65 Inventory - United States TSCA - Sect. 8(b) Australia (AICS): EU EINECS/ELINCS List	Not Listed Not Listed Present Present 200-353-2
Bovine Parainfluenza3 CERCLA/SARA 313 Emission reporting California Proposition 65 EU EINECS/ELINCS List	Not Listed Not Listed Not Listed
Leptospira canicola CERCLA/SARA 313 Emission reporting California Proposition 65 EU EINECS/ELINCS List	Not Listed Not Listed Not Listed
Leptospira grippotyphosa CERCLA/SARA 313 Emission reporting California Proposition 65 EU EINECS/ELINCS List	Not Listed Not Listed Not Listed
Leptospira hardjo CERCLA/SARA 313 Emission reporting	Not Listed

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin Revision date: 26-Nov-2013

Version: 2.0

Page 8 of 9

15. REGUL	ATORY INFORMATION
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed
Leptospira icterohaemorrhagiae	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed
Leptospira pomona	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed
Merthiolate (as mercury)	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS/ELINCS List	200-210-4
Bovine Respiratory Syncytial Virus	
CERCLA/SARA 313 Emission reporting	Not Listed Not Listed
California Proposition 65 EU EINECS/ELINCS List	Not Listed
EU EINECS/ELINCS LIST	NOT LISTED
Bovine Rhinotrachetitis	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed
Bovine Virus Diarrhea	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed
Gentamicin	NotListad
CERCLA/SARA 313 Emission reporting	Not Listed Not Listed
California Proposition 65	Present
Australia (AICS): Standard for the Uniform Scheduling	Schedule 4
for Drugs and Poisons:	
EU EINECS/ELINCS List	215-765-8
	2101000

16. OTHER INFORMATION

Text of R phrases and GHS Classification abbreviations mentioned in Section 3

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine, Modified Live & Killed Virus-Leptospira Canicola-Grippotyphosa-Hardjo-Ichterohaemorrhagiae-Pomona Bacterin Revision date: 26-Nov-2013 Page 9 of 9

Version: 2.0

H330 - Fatal if inhaled H310 - Fatal in contact with skin H300 - Fatal if swallowed H373 - May cause damage to organs through prolonged or repeated exposure H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects R33 - Danger of cumulative effects. R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Data Sources: The data contained in this MSDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature. Reasons for Revision: Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking. Updated Section 2 - Hazard Identification. Updated Section 4 - First Aid Measures. Updated Section 5 - Fire Fighting Measures. Updated Section 7 - Handling and Storage. Updated Section 8 - Exposure Controls / Personal Protection. Updated Section 11 - Toxicology Information. Updated Section 15 - Regulatory Information.

Prepared by:

Toxicology and Hazard Communication Zoetis Global Risk Management

Zoetis Inc. believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet