This SDS packet was issued with item:

078912861

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

078404056 078422781 078423088 078423294 078425716

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).

078912801 078912815 078912844



Revision date: 23-Oct-2013

Version: 2.0

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

Product Identifier

Material Name: Bovine Rhinotracheitis-Parainfluenza3 Vaccine, Modified Live Virus

Trade Name: Chemical Family: TSV-2 Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Intended Use: Restrictions on Use: Veterinary Vaccine Not for human use

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 sterile diluent

Classification of the Substance or Mixture GHS - Classification Not classified as hazardous

EU Classification:

EU Indication of danger: Not classified

Label Elements	
Signal Word:	Not Classified
Hazard Statements:	Non-hazardous in accordance with international standards for workplace safety.
Other Herende	
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.
Australian Hazard Classification (NOHSC):	Non-Hazardous Substance. Non-Dangerous Goods.

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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

Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
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	*
Bovine Rhinotrachetitis	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Water, purified	7732-18-5	231-791-2	Not Listed	Not Listed	>90

Additional Information:

Trace * Proprietary

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

4. FIRST AID MEASURES

Description of First Aid Measures Eve Contact:	Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention		
	immediately.		
Skin Contact:	Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.		
Ingestion:	Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.		
Inhalation:	Remove to fresh air and keep patient at rest. Seek medical attention immediately.		
Most Important Symptoms and Effects, Both Acute and Delayed			
Symptoms and Effects of Exposure:	No data available		
Medical Conditions Aggravated by Exposure:	None known		
Indication of the Immediate Medical Attention and Special Treatment Needed			
Notes to Physician:	None		

5. FIRE-FIGHTING MEASURES

Extinguishing Media:

Extinguish fires with CO2, extinguishing powder, foam, or water.

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Special Hazards Arising from the Substance or Mixture

Hazardous CombustionFormation of toxic gases is possible during heating or fire.Products:

Fire / Explosion Hazards: Fine particles (such as dust and mists) may fuel fires/explosions.

Advice for Fire-Fighters

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Environmental Precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up

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

Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing dust, vapor or mist. Avoid accidental injection. When handling, use proper personal protective equipment as specified in Section 8.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions:	Store under refrigeration in closed container.
Storage Temperature:	2-7°C
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

Refer to available public information for specific member state Occupational Exposure Limits.

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/m³ to < 1000ug/m³)

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Controls Engineering Controls: Personal Protective Equipment:	General room ventilation is adequate unless the process generates dust, mist or fumes. 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:	Safety glasses or goggles
Skin:	Wear protective clothing when working with large quantities.
Respiratory protection:	Respiratory protection is recommended as a precaution to minimize exposure when handling this material in bulk.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Freeze-dried preparation diluent	plus sterile	Color:	No data available.
Odor:	No data available.		Odor Threshold:	No data available.
Molecular Formula:	Mixture		Molecular Weight:	Mixture
Molecular i crimala.	Mixture		molecular Weight.	Wixture
Solvent Solubility:	No data available			
Water Solubility:	No data available			
Solubility:	Soluble: Water (based on	components)		
pH:	7.0 +/- 1.5	componente)		
Melting/Freezing Point (°C):	No data available			
Boiling Point (°C):	>100			
Partition Coefficient: (Method, pH, E No data available	indpoint, Value)			
Decomposition Temperature (°C):	No data available.			
Evaporation Rate (Gram/s):	No data available			
Vapor Pressure (kPa):	Expected to be negligib No data available	le		
Vapor Density (g/ml): Relative Density:	No data available			
Specific Gravity:	1.0 + / - 0.2			
Viscosity:	No data available			
viscosity.				
Flammablity: Autoignition Temperature (Solid) (°C): Flammability (Solids): Flash Point (Liquid) (°C): Upper Explosive Limits (Liquid) (% by Vol.): Lower Explosive Limits (Liquid) (% by Vol.):		No data ava No data ava No data ava No data ava No data ava Will pot occi	ilable ilable ilable ilable	
Polymerization:	(// by /0 1.).	Will not occ		

10. STABILITY AND REACTIVITY

 Reactivity:
 No data available

 Chemical Stability:
 Stable

 Possibility of Hazardous Reactions
 No data available

 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.

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	10. STABILITY AND REACTIVITY
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 Effect	S
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 modified or inactivated preparations of microorganisms.
Acute Toxicity: (Species, Route, En	d Point, Dose)

Gentamicin

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

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

Gentamicin Eye Irritation Rabbit Non-irritating

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

Gentamicin Embryo / Fetal Development Rat Intramuscular 75 mg/kg/day LOAEL Developmental toxicity

Carcinogen Status:

None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

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	12. ECOLOGICAL INFORMATION
Environmental Overview:	The environmental characteristics of this material have not been fully evaluated. 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. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

14. TRANSPORT INFORMATION

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

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:

None required 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.

Bovine Parainfluenza3

CERCLA/SARA 313 Emission reporting

Not Listed

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15. REGULATORY INFORMATION	
California Proposition 65	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
Gentamicin	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Australia (AICS):	Present
Standard for the Uniform Scheduling	Schedule 4
for Drugs and Poisons:	
EU EINECS/ELINCS List	215-765-8
Water, purified	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
REACH - Annex IV - Exemptions from the	Present
obligations of Register:	
EU EINECS/ELINCS List	231-791-2

16. OTHER INFORMATION

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 11 - Toxicology Information.
Prepared by:	Toxicology and Hazard Communication Zoetis Global Risk Management

Pfizer Inc believes that the information contained in this Material Safety Data Sheet is accurate. While Pfizer provides this information in good faith, it does not expressly or impliedly warrant its accuracy.

End of Safety Data Sheet