

Revision date: 23-Sep-2013

Version: 1.0

Page 1 of 7

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

Product Identifier

Material Name: VANGUARD® DM

Trade Name: Svnonvms: **Chemical Family:** Vanguard® Canine Distemper-Measles Vaccine 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

Freeze-dried preparation plus sterile diluent

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

EU Classification:

Australian Hazard Classification

EU Indication of danger: Not classified

Label Elements Signal Word:

Not Classified

Non-hazardous in accordance with international standards for workplace safety. Hazard Statements:

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. May be harmful if swallowed. May cause eye, skin and respiratory tract irritation (based on components) Non-Hazardous Substance. Non-Dangerous Goods.

(NOHSC):

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	%
Canine Distemper	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Measles Virus, Edmonston, MLV	Not Assigned	Not Listed	Not Listed	Not Listed	*
Stabilizer Solution	Proprietary	Not Listed	Not Listed	Not Listed	*

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

- Eye 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 No data available Exposure: Medical Conditions None known

Aggravated by Exposure:

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.

Special Hazards Arising from the Substance or Mixture

Material Name: VANGUARD® DM Revision date: 23-Sep-2013

Hazardous Combustion Products:	Formation of toxic gases is possible during heating or fire.			
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 /	Contain the source of spill if it is safe to do so.	Collect spill with absorbent material. Clean spill
Collecting:	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

Avoid accidental injection. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing dust, vapor or mist. Use appropriate personal protective equipment. Wash thoroughly after handling. Releases to the environment should be avoided.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions:	Store as directed by product packaging. Store in a cool place out of sun and away from heat, sparks, and flame. Do not freeze.
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 th

OEB 2 (control exposure to the range of 100ug/m³ to < 1000ug/m³)

Exposure Controls

Engineering Controls:

General room ventilation is adequate unless the process generates dust, mist or fumes.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Equipment:	protective equipment (PPE).
Hands:	Wear impervious gloves if skin contact is possible.
Eyes:	Safety glasses or goggles
Skin:	Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.
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:	Freeze-dried preparation preparation precedent	olus sterile	Color:	No data available.
Odor:	No data available.		Odor Threshold:	No data available.
Molecular Formula:	Mixture		Molecular Weight:	Mixture
Solvent Solubility:	No data available			
Water Solubility:	No data available			
pH:	No data available.			
Melting/Freezing Point (°C):	No data available			
Boiling Point (°C):	No data available.			
Partition Coefficient: (Method, pH, E	ndpoint, Value)			
No data available				
Decomposition Temperature (°C):	No data available.			
Evaporation Rate (Gram/s):	No data available			
Vapor Pressure (kPa):				
Vapor Density (g/ml):	No data available			
Relative Density:	No data available			
Viscosity:	No data available			
Flammablity:				
Autoignition Temperature (So	lid) (°C):	No data ava	ilahle	
Flammability (Solids):		No data ava		
Flash Point (Liquid) (°C):		No data ava		
Upper Explosive Limits (Liqui	d) (% by Vol.):	No data ava		
Lower Explosive Limits (Liqui		No data ava		
LOWER EXPLOSIVE LIMITS (LIQUI	u) (/0 by vol.).	no uala ava	liable	

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions	No data available Stable under normal conditions of use.
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:	Thermal decomposition products may include carbon monoxide, carbon dioxide and other toxic vapors.

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 modified or inactivated preparations of microorganisms.

Acute Toxicity: (Species, Route, End 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 com	ponents of this for	rmulation a	re listed as a carcinogen by IARC, NTP or OSHA.

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.

Canine Distemper	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed
Measles Virus, Edmonston, MLV	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed
Stabilizer Solution	
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

15. REGULATORY INFORMATION	
Standard for the Uniform S for Drugs and Poisons:	Scheduling Schedule 4
EU EINECS/ELINCS List	215-765-8
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:	New data sheet.
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