# This SDS packet was issued with item:

078912800

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



Revision date: 22-Nov-2013 Version: 3.0 Page 1 of 7

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

**Product Identifier** 

Material Name: CALFGUARD

Calf-Guard **Trade Name: Chemical Family:** 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

Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem **Belgium** 

**Emergency telephone number:** 

CHEMTREC (24 hours): 1-800-424-9300

Contact E-Mail: VMIPSrecords@zoetis.com International CHEMTREC (24 hours): +1-703-527-3887

### 2. HAZARDS IDENTIFICATION

Appearance: Lyophilized powder

Classification of the Substance or Mixture

**GHS - Classification** Not classified as hazardous

**EU Classification:** 

**Emergency telephone number:** 

EU Indication of danger: Not classified

**Label Elements** 

Signal Word: Not Classified

**Hazard Statements:** Not classified in accordance with international standards for workplace safety.

Other Hazards

**Short Term:** Contains trace quantities of penicillin which can cause allergic reactions in susceptible

individuals. Toxicity following ingestion is not expected. However, ingestion should be avoided. 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.

Long Term: Repeated exposure to dust or mist may produce allergic reactions.

**Australian Hazard Classification** 

(NOHSC):

10000414

Non-Hazardous Substance. Non-Dangerous Goods.

Material Name: CALFGUARD Page 2 of 7
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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	%
Sucrose	57-50-1	200-334-9	Not Listed	Not Listed	*
Streptomycin	57-92-1	200-355-3	Not Listed	Not Listed	<0.1%
Penicillin	1406-05-9	215-794-6	Not Listed	Not Listed	<0.1%

Ingredient	CAS Number	EU EINECS/ELINCS	EU Classification	GHS Classification	%
		List			
Coronavirus - Modified Live Virus	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Rotavirus - Modified Live Virus	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*

Additional Information: \* 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 For information on potential

For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Exposure: Identification and/or Section 11 - Toxicological Information.

Medical Conditions People allergic to penicillins may exhibit cross reaction sensitivity.

**Medical Conditions**People allergic to penicillins may exhibit cross reaction sensitiv **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.

Material Name: CALFGUARD Page 3 of 7
Revision date: 22-Nov-2013 Version: 3.0

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### Special Hazards Arising from the Substance or Mixture

**Hazardous Combustion** Formation of toxic gases is possible during heating or fire.

**Products:** 

Fine particles (such as dust and mists) may fuel fires/explosions. Dust can form an explosive

mixture in air.

#### Advice for Fire-Fighters

Wear approved positive pressure, self-contained breathing apparatus and full protective turn out gear.

### 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 sour

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**

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep away from heat, sparks, and flame. Minimize dust generation and accumulation. Avoid accidental injection. When handling, use appropriate personal protective equipment (see Section 8).

### Conditions for Safe Storage, Including any Incompatibilities

**Storage Conditions:** Store as directed by product packaging.

**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.

#### **Sucrose**

10 mg/m<sup>3</sup> ACGIH Threshold Limit Value (TWA) **Australia TWA** 10 mg/m<sup>3</sup> **Belgium OEL - TWA** 10 mg/m<sup>3</sup> **Bulgaria OEL - TWA** 10.0 ma/m<sup>3</sup> 10 mg/m<sup>3</sup> **Estonia OEL - TWA** 10 mg/m<sup>3</sup> France OEL - TWA **Ireland OEL - TWAs** 10 mg/m<sup>3</sup> Latvia OEL - TWA 5 mg/m<sup>3</sup> Lithuania OEL - TWA 10 mg/m<sup>3</sup>

Material Name: CALFGUARD Page 4 of 7
Revision date: 22-Nov-2013 Version: 3.0

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

 OSHA - Final PELS - TWAs:
 15 mg/m³

 Portugal OEL - TWA
 10 mg/m³

 Slovakia OEL - TWA
 6 mg/m³

 Spain OEL - TWA
 10 mg/m³

Streptomycin

**Bulgaria OEL - TWA**0.1 mg/m³ **Latvia OEL - TWA**0.1 mg/m³

Penicillin

**Bulgaria OEL - TWA** 0.1 mg/m<sup>3</sup> **Sweden OEL - TWAs** 0.1 mg/m<sup>3</sup>

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.

Streptomycin

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

**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 aerosols.

Personal Protective Refer to applicable national standards and regulations in the selection and use of personal

**Equipment:** protective equipment (PPE).

**Hands:** Wear impervious gloves if skin contact is possible. **Eyes:** Wear safety glasses or goggles if eye contact is possible.

Skin: Individuals with known sensitivity to penicillin should wear long sleeves to avoid skin contact.

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:Lyophilized powderColor: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

Solubility: Soluble: Water (based on components)

pH: No data available.

Melting/Freezing Point (°C): No data available
Boiling Point (°C): No data available.

Partition Coefficient: (Method, pH, Endpoint, Value)

No data available

**Decomposition Temperature (°C):** No data available.

Evaporation Rate (Gram/s):No data availableVapor Pressure (kPa):No data availableVapor Density (g/ml):No data availableRelative Density:No data available

Material Name: CALFGUARD Page 5 of 7
Revision date: 22-Nov-2013 Version: 3.0

Viscosity: No data available

Flammablity:

Autoignition Temperature (Solid) (°C):

No data available
Flammability (Solids):

No data available

Flash Point (Liquid) (°C):

No data available (estimated)

Upper Explosive Limits (Liquid) (% by Vol.):

Lower Explosive Limits (Liquid) (% by Vol.):

Polymerization:

No data available

No data available

Will not occur

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use.

**Possibility of Hazardous Reactions** 

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:** 

No data available

## 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)

Sucrose

Rat Oral LD50 29.7 g/kg

Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

Sucrose

Bacterial Mutagenicity (Ames) Salmonella Negative

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

Material Name: CALFGUARD Page 6 of 7
Revision date: 22-Nov-2013 Version: 3.0

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## 12. ECOLOGICAL INFORMATION

Environmental Overview: The environmental characteristics of this mixture 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.

Sucrose

CERCLA/SARA 313 Emission reporting

Not Listed

California Proposition 65

Not Listed

Material Name: CALFGUARD Page 7 of 7
Revision date: 22-Nov-2013 Version: 3.0

# 15. REGULATORY INFORMATION

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

REACH - Annex IV - Exemptions from the

Present

obligations of Register:

EU EINECS/ELINCS List 200-334-9

Streptomycin

CERCLA/SARA 313 Emission reporting

California Proposition 65

Not Listed

Not Listed

Standard for the Uniform Scheduling

Schedule 4

for Drugs and Poisons:

EU EINECS/ELINCS List 200-355-3

Penicillin

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed
215-794-6

**Coronavirus - Modified Live Virus** 

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed

Not Listed

**Rotavirus - Modified Live Virus** 

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed

Not Listed

## **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 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.

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** 



Revision date: 22-Nov-2013 Version: 3.0 Page 1 of 7

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

**Product Identifier** 

Material Name: CALFGUARD

Calf-Guard **Trade Name: Chemical Family:** 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

Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem **Belgium** 

**Emergency telephone number:** 

CHEMTREC (24 hours): 1-800-424-9300

Contact E-Mail: VMIPSrecords@zoetis.com International CHEMTREC (24 hours): +1-703-527-3887

### 2. HAZARDS IDENTIFICATION

Appearance: Lyophilized powder

Classification of the Substance or Mixture

**GHS - Classification** Not classified as hazardous

**EU Classification:** 

**Emergency telephone number:** 

EU Indication of danger: Not classified

**Label Elements** 

Signal Word: Not Classified

**Hazard Statements:** Not classified in accordance with international standards for workplace safety.

Other Hazards

**Short Term:** Contains trace quantities of penicillin which can cause allergic reactions in susceptible

individuals. Toxicity following ingestion is not expected. However, ingestion should be avoided. 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.

Long Term: Repeated exposure to dust or mist may produce allergic reactions.

**Australian Hazard Classification** 

(NOHSC):

10000414

Non-Hazardous Substance. Non-Dangerous Goods.

Material Name: CALFGUARD Page 2 of 7
Revision date: 22-Nov-2013 Version: 3.0

**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

#### **Hazardous**

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Sucrose	57-50-1	200-334-9	Not Listed	Not Listed	*
Streptomycin	57-92-1	200-355-3	Not Listed	Not Listed	<0.1%
Penicillin	1406-05-9	215-794-6	Not Listed	Not Listed	<0.1%

Ingredient	CAS Number	EU EINECS/ELINCS	EU Classification	GHS Classification	%
		List			
Coronavirus - Modified Live Virus	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*
Rotavirus - Modified Live Virus	NOT ASSIGNED	Not Listed	Not Listed	Not Listed	*

Additional Information: \* 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 For information on potential

For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Exposure: Identification and/or Section 11 - Toxicological Information.

Medical Conditions People allergic to penicillins may exhibit cross reaction sensitivity.

**Medical Conditions**People allergic to penicillins may exhibit cross reaction sensitiv **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.

Material Name: CALFGUARD Page 3 of 7
Revision date: 22-Nov-2013 Version: 3.0

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### Special Hazards Arising from the Substance or Mixture

**Hazardous Combustion** Formation of toxic gases is possible during heating or fire.

**Products:** 

Fine particles (such as dust and mists) may fuel fires/explosions. Dust can form an explosive

mixture in air.

#### Advice for Fire-Fighters

Wear approved positive pressure, self-contained breathing apparatus and full protective turn out gear.

### 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 sour

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**

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep away from heat, sparks, and flame. Minimize dust generation and accumulation. Avoid accidental injection. When handling, use appropriate personal protective equipment (see Section 8).

### Conditions for Safe Storage, Including any Incompatibilities

**Storage Conditions:** Store as directed by product packaging.

**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.

#### **Sucrose**

10 mg/m<sup>3</sup> ACGIH Threshold Limit Value (TWA) **Australia TWA** 10 mg/m<sup>3</sup> **Belgium OEL - TWA** 10 mg/m<sup>3</sup> **Bulgaria OEL - TWA** 10.0 ma/m<sup>3</sup> 10 mg/m<sup>3</sup> **Estonia OEL - TWA** 10 mg/m<sup>3</sup> France OEL - TWA **Ireland OEL - TWAs** 10 mg/m<sup>3</sup> Latvia OEL - TWA 5 mg/m<sup>3</sup> Lithuania OEL - TWA 10 mg/m<sup>3</sup>

Material Name: CALFGUARD Page 4 of 7
Revision date: 22-Nov-2013 Version: 3.0

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

 OSHA - Final PELS - TWAs:
 15 mg/m³

 Portugal OEL - TWA
 10 mg/m³

 Slovakia OEL - TWA
 6 mg/m³

 Spain OEL - TWA
 10 mg/m³

Streptomycin

**Bulgaria OEL - TWA**0.1 mg/m³ **Latvia OEL - TWA**0.1 mg/m³

Penicillin

**Bulgaria OEL - TWA** 0.1 mg/m<sup>3</sup> **Sweden OEL - TWAs** 0.1 mg/m<sup>3</sup>

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.

Streptomycin

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

**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 aerosols.

Personal Protective Refer to applicable national standards and regulations in the selection and use of personal

**Equipment:** protective equipment (PPE).

**Hands:** Wear impervious gloves if skin contact is possible. **Eyes:** Wear safety glasses or goggles if eye contact is possible.

Skin: Individuals with known sensitivity to penicillin should wear long sleeves to avoid skin contact.

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:Lyophilized powderColor: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

Solubility: Soluble: Water (based on components)

pH: No data available.

Melting/Freezing Point (°C): No data available
Boiling Point (°C): No data available.

Partition Coefficient: (Method, pH, Endpoint, Value)

No data available

**Decomposition Temperature (°C):** No data available.

Evaporation Rate (Gram/s):No data availableVapor Pressure (kPa):No data availableVapor Density (g/ml):No data availableRelative Density:No data available

Material Name: CALFGUARD Page 5 of 7
Revision date: 22-Nov-2013 Version: 3.0

Viscosity: No data available

Flammablity:

Autoignition Temperature (Solid) (°C):

No data available
Flammability (Solids):

No data available

Flash Point (Liquid) (°C):

No data available (estimated)

Upper Explosive Limits (Liquid) (% by Vol.):

Lower Explosive Limits (Liquid) (% by Vol.):

Polymerization:

No data available

No data available

Will not occur

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use.

**Possibility of Hazardous Reactions** 

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:** 

No data available

## 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)

Sucrose

Rat Oral LD50 29.7 g/kg

Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

Sucrose

Bacterial Mutagenicity (Ames) Salmonella Negative

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

Material Name: CALFGUARD Page 6 of 7
Revision date: 22-Nov-2013 Version: 3.0

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## 12. ECOLOGICAL INFORMATION

Environmental Overview: The environmental characteristics of this mixture 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.

Sucrose

CERCLA/SARA 313 Emission reporting

Not Listed

California Proposition 65

Not Listed

Material Name: CALFGUARD Page 7 of 7
Revision date: 22-Nov-2013 Version: 3.0

# 15. REGULATORY INFORMATION

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

REACH - Annex IV - Exemptions from the

Present

obligations of Register:

EU EINECS/ELINCS List 200-334-9

Streptomycin

CERCLA/SARA 313 Emission reporting

California Proposition 65

Not Listed

Not Listed

Standard for the Uniform Scheduling

Schedule 4

for Drugs and Poisons:

EU EINECS/ELINCS List 200-355-3

Penicillin

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed
215-794-6

**Coronavirus - Modified Live Virus** 

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed

Not Listed

**Rotavirus - Modified Live Virus** 

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed

Not Listed

## **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 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.

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**