

Revision date: 04-Dec-2006

Version: 1.3

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

Pfizer Animal Health Pfizer Inc 235 East 42nd Street New York, NY 10017 Poison Control Center Phone: 1-866-531-8896 Technical Services Phone: 1-800-366-5288

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Pfizer Ltd, Kent CT13 9NJ United Kingdom +00 44 (0)1304 616161

Emergency telephone number: ChemSafe (24 hours): +44 (0)208 762 8322

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Respiratory Syncytial Virus Vaccine, Modified Live Virus-Leptospira Pomona Bacterin

| Trade Name: | Bovi-Shield GOLD® IBR-BVD-BRSV-LP |
|------------------|-----------------------------------|
| Chemical Family: | Mixture |
| Intended Use: | Veterinary Vaccine |

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

| Ingredient | CAS Number | EU EINECS List | % |
|--------------------------|------------|----------------|----|
| Gentamicin | 1403-66-3 | 215-765-8 | ## |
| Merthiolate (as mercury) | 54-64-8 | 200-210-4 | ## |

| Ingredient | CAS Number | EU EINECS List | % |
|------------------------------------|--------------|----------------|---|
| Bovine Rhinotrachetitis | NOT ASSIGNED | Not listed | * |
| Bovine Respiratory Syncytial Virus | NOT ASSIGNED | Not listed | * |
| Bovine Virus Diarrhea | NOT ASSIGNED | Not listed | * |
| Leptospira pomona | NOT ASSIGNED | Not listed | * |

Additional Information:

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

3. HAZARDS IDENTIFICATION

| Appearance: | Freeze-dried preparation plus a liquid adjuvanted preparation |
|---|---|
| Statement of Hazard: | Non-hazardous in accordance with international standards for workplace safety. |
| Additional Hazard Information: Short Term: | May cause allergic skin reaction . Dust irritating to respiratory tract. 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. |
| EU Indication of danger: | Not classified |

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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.

4. FIRST AID MEASURES

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

5. FIRE FIGHTING MEASURES

| Extinguishing Media: | As for primary cause of fire. |
|--------------------------------|--|
| Hazardous Combustion Products: | Not known |
| Fire Fighting Procedures: | Treat primary cause of fire. |
| Fire / Explosion Hazards: | Fine particles (such as dust and mists) may fuel fires/explosions. |

6. ACCIDENTAL RELEASE MEASURES

| Health and Safety Precautions: | Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure. |
|--|--|
| Measures for Cleaning / Collecting: | Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill area thoroughly. Avoid generating airborne dust. |
| Measures for Environmental Protections: | Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release. |
| 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

| General Handling: | Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use appropriate personal protective equipment. |
|----------------------|--|
| Storage Conditions: | Store under refrigeration in closed container. |
| Storage Temperature: | 2-7°C (35 - 45°F) |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Material Name: Bovine Rhinotracheitis-Virus Diarrhea-Respiratory Syncytial Virus Vaccine, Modified Live Virus-Leptospira Pomona Bacterin Revision date: 04-Dec-2006

| OSHA - Final PELS - TWAs: ACGIH Threshold Limit Value ACGIH Threshold Limit Value ACGIH - Skin Absorption Desi Australia STEL | (STEL) = 0.03 mg/m ³ STEL | |
|---|--|--|
| | 0 | |
| Australia TWA | = 0.01 mg/m ³ TWA | |
| Engineering Controls: | Engineering controls should be used as the primary means to control exposures. Exposure monitoring may be necessary to determine requirements. | |
| Personal Protective Equipment: | | |
| Hands: Eyes: Skin: | Wear impervious gloves if skin contact is possible. Safety glasses or goggles Wear protective clothing when working with large quantities. Wash hands and arms thoroughly after handling this material. | |

In the event of a spill where the applicable Occupational Exposure Limit (OEL) may be

| exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures below the OEL. |
|--|
| |

9. PHYSICAL AND CHEMICAL PROPERTIES:

Respiratory protection:

| Physical State: Molecular Formula: | Freeze-dried preparation plus Liquid Mixture | Color: Molecular Weight: | No data available. Mixture |
|--|---|-----------------------------|-------------------------------|
| Solubility: pH: Boiling Point (°C): Specific Gravity: | Soluble: Water (based on components) 7.0 +/- 1.5 >100 1.0 +/-0.2 | | |
| Flash Point (Liquid) (°C): | Non-flamr | nable | |

10. STABILITY AND REACTIVITY

| Stability: | Stable | |
|--|--|--|
| Conditions to Avoid: | Avoid prolonged exposure to higher temperatures and/or direct sunlight. Do not freeze. | |
| Incompatible Materials: | None known | |
| Hazardous Decomposition Products: None known | | |

Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

General Information:

The antigens included in this product are non-infectious. All have been prepared from killed or inactivated preparations of microorganisms. The information included in this section describes the potential hazards of the individual ingredients.

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

Merthiolate (as mercury) Rat Oral LD50 75 mg/kg Rat Subcutaneous LD50 98 mg/kg Page 3 of 5

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| <u>Irritation / Sensitization: (Study Type, Species, Severity)</u> Merthiolate (as mercury) |
|--|
| |
| Eye Irritation Rabbit Mild |
| GentamicinEye IrritationRabbit Non-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 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 OSH |
| |

| 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.

| 13. DISPOSAL CONSIDERATIONS | | |
|-----------------------------|--|--|
| Disposal Procedures: | Observe all local and national regulations when disposing of this material. 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

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

15. REGULATORY INFORMATION

EU Indication of danger:

Not classified

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OSHA Label:

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

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.

Gentamicin

Μ

| California Proposition 65 Australia (AICS): | Aminoglycosides- developmental Present |
|--|---|
| Standard for the Uniform Scheduling for Drugs and Poisons: | Schedule 4 |
| EU EINECS List | 215-765-8 |
| lerthiolate (as mercury) | |
| CERCLA/SARA 313 Emission reporting | = 1.0 % Supplier notification limit |
| California Proposition 65 | Developmental |
| Inventory - United States TSCA - Sect. 8(b) | Present |
| Australia (AICS): | Present |
| EU EINECS List | 200-210-4 |

16. OTHER INFORMATION

| Reasons for Revision: | Updated Section 3 - Hazard Identification. Updated Section 5 - Fire Fighting Measures. Updated Section 6 - Accidental Release Measures. Updated Section 8 - Exposure Controls / Personal Protection. Updated Section 11 - Toxicology Information. Updated Section 13 - Disposal Considerations. |
|-----------------------|--|
| Prepared by: | Toxicology and Hazard Communication Pfizer Global Environment, Health, and Safety |

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