Section 1 - Identification of Chemical Product and Company

Intervet Australia Pty Limited
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Fax: 1 800 817 414
Company ABN: 79 008 467 034

Substance: Freeze-dried, live virus.
Trade Name: Fowl Pox Vaccine
Product Code: 3961
Recommended Use: To protect poultry against Fowl Pox.
APVMA No: 40542
Creation Date: November, 2006
This Revision Date: November, 2006

Section 2 - Hazards Identification

Statement of Hazardous Nature:
This product is classified as: Not classified as hazardous according to the criteria of ASCC. Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: Not Hazardous - No criteria found.
Safety Phrases: S22, S25. Do not breathe dust. Avoid contact with eyes.
SUSDP Classification: None allocated.
ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.
UN Number: None allocated

Emergency Overview

Physical Description & Colour: The vaccine is a freeze-dried, live virus vaccine, presented in 9mL antibiotic vials that have been sealed under vacuum and in which there is a 2.5mL plug of dried vaccine.
Odour: No distinctive odour.
Major Health Hazards: no significant risk factors have been found for this product.

Potential Health Effects

Inhalation:
Short Term Exposure: Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.
Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:
Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. However product may be mildly irritating, but is unlikely to cause anything more than mild discomfort which should disappear once contact ceases.
Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:
Short Term Exposure: This product may be mildly irritating to eyes, but is unlikely to cause anything more than mild discomfort which should disappear once product is removed.
Long Term Exposure: No data for health effects associated with long term eye exposure.
**Ingestion:**

**Short Term Exposure:** Significant oral exposure is considered to be unlikely. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term ingestion.

**Carcinogen Status:**

- **ASCC:** No significant ingredient is classified as carcinogenic by ASCC.
- **NTP:** No significant ingredient is classified as carcinogenic by NTP.
- **IARC:** No significant ingredient is classified as carcinogenic by IARC.

### Section 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc,%</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live Fowl Pox virus derived from SPF chicken cell culture</td>
<td></td>
<td></td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Foetal Calf Serum</td>
<td></td>
<td></td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Bovine Albumin</td>
<td></td>
<td></td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Amphotericin B</td>
<td>1397-89-3</td>
<td>not set</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Penicillin G</td>
<td>113-98-4</td>
<td>not set</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Streptomycin sulfate</td>
<td>3810-74-0</td>
<td>not set</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Other non hazardous ingredients</td>
<td>to 100</td>
<td></td>
<td>not set</td>
<td>not set</td>
</tr>
</tbody>
</table>

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The ASCC TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

### Section 4 - First Aid Measures

**General Information:**

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 11 26 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

**Self Injection:** Accidental self injection may lead to an inflammatory response. Medical advice should be sought on the management of deep injections, particularly those near a joint or associated with bruising. If possible the application of gentle squeezing pressure with absorbent material (e.g. facial tissues) at the injection site will swab up unabsorbed vaccine. Strong squeezing of the site should be avoided. The damaged area should be thoroughly cleansed and a topical antiseptic applied.

**Inhalation:** First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Skin Contact:** Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact:** No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

### Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.
**Extinguishing Media:** Not Combustible. Use extinguishing media suited to burning materials.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

**Flash point:**
- Upper Flammability Limit: Does not burn.
- Lower Flammability Limit: Does not burn.
- Autoignition temperature: Not applicable - does not burn.
- Flammability Class: Does not burn.

**Section 6 - Accidental Release Measures**

**Accidental release:** This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, refer to product label for specific instructions. No special protective clothing is normally necessary because of this product. However it is good practice to wear latex gloves when handling vaccines. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

**Section 7 - Handling and Storage**

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** Refrigerate this product to below -5°C (freeze). Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

**Section 8 - Exposure Controls and Personal Protection**

The following Australian Standards will provide general advice regarding safety clothing and equipment:
- ASCC Exposure Limits TWA (mg/m³) STEL (mg/m³)

| Exposure limits have not been established by ASCC for any of the known significant ingredients in this product.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

**Eye Protection:** Eye protection is not normally necessary when this product is being used. However, if in doubt, wear suitable protective glasses or goggles.

**Skin Protection:** The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: rubber, PVC.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

**Section 9 - Physical and Chemical Properties**

**Physical Description & Colour:** The vaccine is a freeze-dried, live virus vaccine, presented in 9mL antibiotic vials that have been sealed under vacuum and in which there is a 2.5mL plug of dried vaccine.

**Odour:** No distinctive odour.

**Boiling Point:** Not applicable.

**Freezing/Melting Point:** Decomposes before melting.
Volatiles: No specific data. Expected to be low at 100°C.
Vapour Pressure: Negligible at normal ambient temperatures.
Vapour Density: No data.
Specific Gravity: No data.
Water Solubility: Greater than 187g/L (i.e. the contents of 1 vial will totally dissolve in 3.5mL of water).
pH: Neutral.
Volatility: Negligible at normal ambient temperatures.
Odour Threshold: No data.
Evaporation Rate: No data.
Coeff Oil/water Distribution: No data
Autoignition temp: Not applicable - does not burn.

Section 10 - Stability and Reactivity
Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Conditions to Avoid: Refrigerate this product. Freezing is acceptable. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatibilities: water, acids, bases, oxidising agents.
Fire Decomposition: No specific data. Based on composition of proteins and fats, the following might be expected: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Water.
Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information
Local Effects: none known

Classification of Hazardous Ingredients
Ingredient Risk Phrases
No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

Section 12 - Ecological Information
This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

Section 13 - Disposal Considerations
Disposal: There are many pieces of legislation covering waste disposal and they differ in each state and territory, so each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. The Hierarchy of Controls seems to be common - the user should investigate: Reduce, Reuse, and Recycle and only if all else fails should disposal be considered. Note that properties of a product may change in use, so that the following suggestions may not always be appropriate. The following may help you in properly addressing this matter for this product. Dispose of empty container by wrapping with paper and putting in garbage. Discarded needles should immediately be placed in a designated and appropriately labelled sharps container.

Section 14 - Transport Information
ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.
AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:
- ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail
- AICS: Australian Inventory of Chemical Substances
- ASCC: Office of the Australian Safety and Compensation Council
- CAS Number: Chemical Abstracts Service Registry Number
- Hazchem Code: Emergency action code of numbers and letters that provide information to emergency services especially firefighters
- IARC: International Agency for Research on Cancer
- NOS: Not otherwise specified
- NTP: National Toxicology Program (USA)
- R-Phrase: Risk Phrase
- SUSDP: Standard for the Uniform Scheduling of Drugs & Poisons
- UN Number: United Nations Number

Please read all labels carefully before using product.
This MSDS is prepared in accord with the ASCC document “National Code of Practice for the Preparation of Material Safety Data Sheets” 2nd Edition [NOHSC:2011(2003)]