SECTION 1 - IDENTIFICATION OF PRODUCT AND COMPANY

Pfizer Inc
Pfizer Animal Health
235 East 42nd Street
New York, NY 10017

Emergency telephone 1-866-531-8896
Hours of operation 24 Hours
Telephone 1-800-366-5288

Trade names Vanguard® Plus 5/CV

Product name Canine Distemper-Adenovirus Type 2-Parainfluenza-Parvovirus Vaccine, Modified Live and Killed Virus

Therapeutic use Veterinary Vaccine

Description Freeze-dried preparation

SECTION 2 - COMPOSITION

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canine Adenovirus Type 2</td>
<td>Not assigned</td>
<td>Trade secret</td>
</tr>
<tr>
<td>Canine Coronavirus</td>
<td>Not assigned</td>
<td>Trade secret</td>
</tr>
<tr>
<td>Canine Distemper</td>
<td>Not assigned</td>
<td>Trade secret</td>
</tr>
<tr>
<td>Canine Parainfluenza</td>
<td>Not assigned</td>
<td>Trade secret</td>
</tr>
<tr>
<td>Canine Parvovirus</td>
<td>Not assigned</td>
<td>Trade secret</td>
</tr>
<tr>
<td>Merthiolate (as mercury)*</td>
<td>54-64-8</td>
<td>Trace</td>
</tr>
<tr>
<td>Penicillin*</td>
<td>1406-05-9</td>
<td>Trace</td>
</tr>
<tr>
<td>Streptomycin*</td>
<td>57-92-1</td>
<td>Trace</td>
</tr>
</tbody>
</table>

*Hazardous

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

SECTION 3 - HAZARDS IDENTIFICATION

Signal word WARNING!

Statements of hazard MAY CAUSE ALLERGIC REACTION IN PENICILLIN-SENSITIVE INDIVIDUALS.

Eye effects None known; however, direct contact with any foreign material may cause eye irritation.

Skin effects Contains trace quantities of penicillin which can cause allergic reactions in susceptible individuals.

Inhalation effects Contains trace quantities of penicillin which can cause allergic reactions in susceptible individuals. An Occupational Exposure Limit has been established for one or more of the ingredients (see Section 8).
SECTION 3 - HAZARDS IDENTIFICATION

Ingestion effects
Contains trace quantities of penicillin which can cause allergic reactions in susceptible individuals.

Other potential health effects
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.

Route of entry
Skin contact, inhalation, accidental injection

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.

SECTION 4 - FIRST AID MEASURES

Skin
Wash skin with soap and water. If irritation occurs or persists, get medical attention.

Eyes
Immediately flush eyes with water for at least 15 minutes. If irritation occurs or persists, get medical attention.

Inhalation
Remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion
Get medical attention. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

General hazard
This material is not expected to support combustion.

Fire fighting instructions
Dike and collect water used to fight fire.

Extinguishing media
As for primary cause of fire.

Flash point
Non-flammable

Hazardous combustion products
Not known

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General
Review Sections 3, 8 and 12 before proceeding with clean up.

Small spill
Wipe up with a damp cloth and place in container for disposal. Clean spill area thoroughly. Prevent discharge to drains.
SECTION 6 - ACCIDENTAL RELEASE MEASURES

Large spill
Spills should be handled by vacuuming or wet mopping. Transfer all waste to a labeled container and move it to a secure holding area. Prevent discharge to drains.

SECTION 7 - HANDLING AND STORAGE

General handling
Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Use appropriate personal protective equipment. Avoid breathing dust, vapor or mist.

Storage conditions
Store under refrigeration in closed container.

Temperature range for storage
2-7°C

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

<table>
<thead>
<tr>
<th>Compound</th>
<th>Issuer</th>
<th>Type</th>
<th>OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merthiolate (as mercury)</td>
<td>OSHA</td>
<td>TWA-8 Hr</td>
<td>0.01 mg/m³ (skin)</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>TWA-8 Hr</td>
<td>0.1 mg/m³ (skin)</td>
</tr>
</tbody>
</table>

Exposure information
See exposure limits for component(s) listed above.

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

Respiratory protection
Respiratory protection is recommended as a precaution to minimize exposure when handling this material in bulk.

Eye protection
Safety glasses or goggles

Skin protection
Individuals with known sensitivity to penicillin should wear long sleeves to avoid skin contact. Wash hands and arms thoroughly after handling this material.

Hand protection
Wear impervious gloves if skin contact is possible.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical form
Freeze-dried preparation

Color
No data available

Molecular weight
Mixture

Molecular formula
Mixture

pH
7.0 +/- 1.5 standard pH units
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling point  >100°C
Melting point  Not applicable
Density       No data available
Vapor pressure Expected to be negligible
Water solubility No data available
Solvent solubility No data available
Specific gravity 1.0 +/-0.2

SECTION 10 - STABILITY AND REACTIVITY

Reactivity  Stable
Conditions to avoid Store at 2°-7°C. Prolonged exposure to higher temperatures may adversely affect potency. Do not freeze.
Incompatibilities 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.
Hazardous polymerization Will not occur

SECTION 11 - TOXICOLOGY INFORMATION

Toxicology summary The antigens included in this product are non-infectious. All have been prepared from killed or inactivated preparations of microorganisms.

Acute toxicity
Eye  No data available
Skin  No data available
Inhalation  No data available
Ingestion  No data available
Mutagenicity No data available
Sensitization This product contains merthiolate which is considered to be a skin sensitizer. Hypersensitivity reactions can occur in individuals sensitive to penicillin, streptomycin, and/or other aminoglycosides.
Subchronic effects No data available
SECTION 11 - TOXICOLOGY INFORMATION

Chronic effects/carcinogenicity
No data available

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

Reproductive effects
Not considered to be a reproductive hazard.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental overview
The environmental characteristics of this material have not been fully evaluated. Releases to the environment should be avoided.

SECTION 13 - DISPOSAL INFORMATION

Disposal procedure
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).

SECTION 14 - TRANSPORTATION INFORMATION

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

SECTION 15 - REGULATORY INFORMATION

EU Classification
Not classified

California Proposition 65
Aminoglycosides (Streptomycin); Mercury (as Merthiolate)

Canadian WHMIS
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.

SECTION 16 - OTHER

Disclaimer
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.