SAFETY DATA SHEET

1. Identification

Product identifier  
Equivac HeV

Other means of identification

Synonyms  
Equivac HeV Hendra Virus Vaccine for horses

Recommended use of the chemical and restrictions on use

Recommended use  
Veterinary vaccine

Restrictions on use  
Not for human use

Details of manufacturer or importer

Company Name (AU)  
Zoetis Australia Pty Ltd

ABN 94 156 476 425

Level 6, 5 Rider Boulevard

Rhodes NSW 2138 AUSTRALIA

Tel  
1800 814 883

Fax  
(02) 8876 0444

Email  
productsupport.au@zoetis.com

Emergency Phone  
1800 814 883 (all hours)

Police and Fire Brigade  
Dial 000

If ineffective  
Dial Poisons Information Centre (13 1126 from anywhere in Australia)

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards  
Not classified.

Health hazards  
Not classified.

Environmental hazards  
Not classified.

Label elements, including precautionary statements

Hazard symbol(s)  
None.

Signal word  
None.

Hazard statement(s)  
The mixture does not meet the criteria for classification.

Precautionary statement(s)

Prevention  
Observe good industrial hygiene practices.

Response  
Wash hands after handling.

Storage  
Store away from incompatible materials.

Disposal  
Dispose of waste and residues in accordance with local authority requirements.

Other hazards which do not result in classification

In the event of accidental injection, an allergic reaction may occur.

Supplemental information  
None.

3. Composition/information on ingredients

Mixture

<table>
<thead>
<tr>
<th>Identity of chemical ingredients</th>
<th>CAS number and other unique identifiers</th>
<th>Concentration of ingredients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hendra virus HeV soluble G (sG) protein</td>
<td>Not established</td>
<td>100 μg/mL</td>
</tr>
<tr>
<td>Synthetic adjuvant</td>
<td>Not assigned</td>
<td>*</td>
</tr>
<tr>
<td>Thimerosal</td>
<td>54-64-8</td>
<td>##</td>
</tr>
</tbody>
</table>
Composition comments:  # Trace
*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Description of necessary first aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** In the case of skin contact, immediately wash the skin with plenty of soap and water. In the event of accidental self injection or needle stick injury, wash the injury thoroughly with clean running water. Get medical attention immediately.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Call a physician or poison control centre immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

**Personal protection for first-aid responders** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**Symptoms caused by exposure** Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort. In the event of accidental injection, an allergic reaction may occur. Signs and symptoms might include skin rash, itching, redness or swelling. Respiratory reactions may be characterized by rhinitis, sneezing, scratchy throat, oral mucosal edema, laryngeal mucosal edema, coughing, shortness of breath, wheezing, and chest pain. Asthma like reactions occur with acute exposures in sensitized patients.

**Medical attention and special treatment** Treat symptomatically.

5. Fire-fighting measures

**Extinguishing media**
- Water fog
- Foam
- Dry chemical powder
- Carbon dioxide (CO2)

**Suitable extinguishing media**
- Water jet as an extinguisher, as this will spread the fire.

**Unsuitable extinguishing media**
- During fire, gases hazardous to health may be formed.

**Specific hazards arising from the chemical**
- Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special protective equipment and precautions for fire fighters**
- Move containers from fire area if you can do so without risk.

**Hazchem code**
- None.

**General fire hazards**
- No unusual fire or explosion hazards noted.

**Specific methods**
- Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
- For non-emergency personnel: Keep unnecessary personnel away.
- For emergency responders: Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**Environmental precautions**
- Avoid discharge into drains, water courses or onto the ground.
- This product is miscible in water.

**Methods and materials for containment and cleaning up**
- Large Spills: Stop the flow of material, if this is without risk. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.
- Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
- Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
7. Handling and storage

Precautions for safe handling
Avoid accidental injection. Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapour. Wash thoroughly after handling. When using, do not eat, drink or smoke. Wear personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Refrigeration recommended. 2 - 8°C (36 - 46°F). Do not freeze. Store in original tightly closed container. Keep away from heat, sparks and open flame.

8. Exposure controls and personal protection

Control parameters
Follow standard monitoring procedures.

Occupational exposure limits

<table>
<thead>
<tr>
<th>Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>Thimerosal (CAS 54-64-8)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>Thimerosal (CAS 54-64-8)</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Exposure guidelines
No exposure standards allocated.

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection
Wear safety glasses or goggles if eye contact is possible.

Skin protection
Hand protection
Wear impervious gloves if skin contact is possible.

Other
Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.

Respiratory protection
No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards
Not applicable.

Hygiene measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Physical state
Liquid.
Form
Liquid.
Colour
Clear.
Odour
Not available.
Odour threshold
Not available.
pH
Not available.
Melting point/freezing point
0 °C (32 °F) estimated
Initial boiling point and boiling range
100 °C (212 °F) estimated
Flash point
Not available.
Evaporation rate
Not available.
Flammability (solid, gas)
Not applicable.
Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.
Flammability limit - upper (%)
Explosive limit - lower (%)
Explosive limit – upper (%)
Vapour pressure
Vapour density
Relative density
Solubility(ies)
Solubility (water)
Partition coefficient (n-octanol/water)
Auto-ignition temperature
Decomposition temperature
Viscosity
Other physical and chemical parameters
Explosive properties
Oxidising properties

10. Stability and reactivity
Reactivity
Chemical stability
Possibility of hazardous reactions
Conditions to avoid
Incompatible materials
Hazardous decomposition products

Material is stable under normal conditions of use, storage and transport.
No dangerous reaction known under conditions of normal use.
Contact with incompatible materials.
Strong oxidising agents.
No hazardous decomposition products are known. May include products of carbon, nitrogen, metallic mercury.

11. Toxicological information
Information on possible routes of exposure
Inhalation
Skin contact
Eye contact
Thimerosal
Species: Rabbit
Severity: Mild

Ingestion
May cause discomfort if swallowed.

Symptoms related to exposure
Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort. In the event of accidental injection, an allergic reaction may occur. Signs and symptoms might include skin rash, itching, redness or swelling. Respiratory reactions may be characterized by rhinitis, sneezing, scratchy throat, oral mucosal edema, laryngeal mucosal edema, coughing, shortness of breath, wheezing, and chest pain. Asthma like reactions occur with acute exposures in sensitized patients.

Acute toxicity
Not acutely toxic

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thimerosal (CAS 54-64-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>91 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>75 mg/kg</td>
</tr>
<tr>
<td>Subcutaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>98 mg/kg</td>
</tr>
</tbody>
</table>

Material name: Equivac HeV
3298
Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/irritation Direct contact with eyes may cause temporary irritation.

Eye contact

Thimerosal Species: Rabbit Severity: Mild

Respiratory or skin sensitisation

Respiratory sensitisation Not a respiratory sensitizer.

Skin sensitisation This product is not expected to cause skin sensitisation.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Due to partial or complete lack of data the classification is not possible.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Other information The antigens included in this product are non-infectious. All have been prepared from attenuated preparations of microorganisms.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Avoid release to the environment.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available for this product.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods Avoid release to the environment. 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. Dispose of contents/container in accordance with local/regional/national/international regulations.

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

ADG Not regulated as dangerous goods.

RID Not regulated as dangerous goods.

IATA Not regulated as dangerous goods.

IMDG Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.
15. Regulatory information

Safety, health and environmental regulations

National regulations

This Safety Data Sheet was prepared in accordance with the Australia Model Code of Practice for the preparation of safety data sheets for hazardous chemicals.

APVMA No. 68996

Australia Medicines & Poisons Appendix A
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix D
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E
Thimerosal (CAS 54-64-8)

Australia Medicines & Poisons Appendix F
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G
Thimerosal (CAS 54-64-8)

Australia Medicines & Poisons Appendix H
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J
Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 10
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2
Thimerosal (CAS 54-64-8)

Australia Medicines & Poisons Schedule 3
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7
Thimerosal (CAS 54-64-8)

Australia Medicines & Poisons Schedule 8
Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9
Poisons schedule number not allocated.

Australia National Pollutant Inventory (NPI): Threshold quantity
Thimerosal (CAS 54-64-8) 5 kg Threshold Category: 1B

High Volume Industrial Chemicals (HVIC)
Not listed.

Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)
Not listed.

National Pollutant Inventory (NPI) substance reporting list
Thimerosal (CAS 54-64-8) 2000 TONNES/YR Threshold Category: 2B

Prohibited Carcinogenic Substances
Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)
Not listed.
Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)
Not listed.

Restricted Carcinogenic Substances
Not regulated.

International regulations

**Stockholm Convention**
Not applicable.

**Rotterdam Convention**
- Thimerosal (CAS 54-64-8) Pesticide

**Kyoto Protocol**
Not applicable.

**Montreal Protocol**
Not applicable.

**Basel Convention**
Not applicable.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Industrial Chemicals (AICIS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

**Issue date**
14-September-2016

**Revision date**
11-October-2021

**Disclaimer**
Zoetis Inc. believes that the information contained in this 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. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision information**
- Identification: Restrictions on use
- Composition / Information on Ingredients: Disclosure Overrides
- Composition/information on ingredients: Composition comments
- First-aid measures: Ingestion
- First-aid measures: Skin contact
- Accidental release measures: Methods and materials for containment and cleaning up
- Accidental release measures: For non-emergency personnel
- Toxicological information: Acute toxicity
- Toxicological information: Ingestion
- Disposal considerations: Disposal methods
- Regulatory information: National regulations
- GHS: Classification