SAFETY DATA SHEET

1. Identification

Product identifier: Duvaxyn EHV 1,4 Vaccine

Other means of identification:

Synonyms: DUVAXYN * EQUIP EHV 1,4 * Duvaxyn® EHV 1,4 Inactivated Adjuvanted Equine Herpes Vaccine

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: None known.

Supplemental information: Direct contact with eyes may cause temporary irritation. In the event of accidental injection, an allergic reaction may occur.

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>Inactivated Equine Herpes virus type 1</td>
<td>Not assigned</td>
<td>*</td>
</tr>
<tr>
<td>Inactivated Equine Herpes virus type 4</td>
<td>Not assigned</td>
<td>*</td>
</tr>
</tbody>
</table>

Composition comments: Other components below reportable levels

*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**
Remove contact lenses, if present and easy to do. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**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**
Provide general supportive measures and treat symptomatically.

5. Fire-fighting measures

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

**Suitable extinguishing media**
Do not use 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.

**Fire fighting equipment/instructions**
None.

**Hazchem code**
None.

**General fire hazards**
No unusual fire or explosion hazards noted. This product is a nonflammable aqueous solution.

**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. For personal protection, see section 8 of the SDS.

**Environmental precautions**
- **Methods and materials for containment and cleaning up**
  Avoid discharge into drains, water courses or onto the ground.
  This product is miscible in water.
  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.
Refrigeration recommended. 2 - 8˚C (36 - 46˚F). Do not freeze. Store away from incompatible materials (see Section 10 of the SDS). 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
No exposure limits noted for ingredient(s).

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

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
If contact is likely, safety glasses with side shields are recommended.

Skin protection
Wear appropriate chemical resistant gloves.

Hand protection
Wear suitable protective clothing. Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.

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

Respiratory protection
No personal respiratory protective equipment normally required. If ventilation is insufficient, suitable respiratory protection must be provided.

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
Not available.

Odour
Not available.

Odour threshold
Not available.

pH
Not available.

Melting point/freezing point
0 °C (32 °F)

Initial boiling point and boiling range
100 °C (212 °F)

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 (%)
Not available.

Explosive limit - lower (%)
Not available.

Explosive limit – upper (%)
Not available.

Vapour pressure
Not available.

Vapour density
Not available.

Relative density
Not available.

Solubility(ies)

Solubility (water)
100 %

Partition coefficient (n-octanol/water)
Not available.
Auto-ignition temperature  Not available.
Decomposition temperature  Not available.
Viscosity  Not available.

Other physical and chemical parameters

Explosive properties  Not explosive.
Oxidising properties  Not oxidising.
Specific gravity  0.9

10. Stability and reactivity

Reactivity  The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability  Material is stable under normal conditions.
Possibility of hazardous reactions  No dangerous reaction known under conditions of normal use.
Conditions to avoid  Contact with incompatible materials. Keep away from heat, sparks, flame and all other sources of ignition. Protect from sunlight. Protect from freezing.

Incompatible materials  Strong oxidising agents.
Hazardous decomposition products  No hazardous decomposition products are known. May include products of carbon, nitrogen.

11. Toxicological information

Information on possible routes of exposure

Inhalation  No adverse effects due to inhalation are expected.
Skin contact  Prolonged skin contact may cause temporary irritation.
Eye contact  Direct contact with eyes may cause temporary irritation.
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
Skin corrosion/irritation  Prolonged skin contact may cause temporary irritation.
Serious eye damage/irritation  Direct contact with eyes may cause temporary irritation.
Respiratory or skin 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.
Chronic effects  None known.
Other information  The antigens included in this product are non-infectious. All have been prepared from attenuated preparations of microorganisms.
12. Ecological information

Ecotoxicity  Due to partial or complete lack of data the classification for hazardous to the aquatic environment, is not possible. 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 available for this product.

Bioaccumulative potential  No data available for this product.

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.

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. 48485

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  Poisons schedule number not allocated.

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

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

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
Poisons schedule number not allocated.
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
Poisons schedule number not allocated.
Australia Medicines & Poisons Schedule 8
Poisons schedule number not allocated.
Australia Medicines & Poisons Schedule 9
Poisons schedule number not allocated.
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
Not listed.
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
Not applicable.
Kyoto Protocol
Not applicable.
Montreal Protocol
Not applicable.
Basel Convention
Not applicable.
International Inventories
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<td>Canada</td>
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<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
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<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
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</tbody>
</table>

*"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

<table>
<thead>
<tr>
<th>Issue date</th>
<th>14-September-2016</th>
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<tr>
<td>Revision date</td>
<td>11-October-2021</td>
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<tr>
<td>Further information</td>
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<td>Disclaimer</td>
<td>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.</td>
</tr>
<tr>
<td>Revision information</td>
<td>This document has undergone significant changes and should be reviewed in its entirety.</td>
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