1. Identification

Product identifier: Respisure® HPS Vaccine (Inactivated)

Other means of identification:
- Synonyms: SUVAXYN * Suvaxyn HPS * Suvaxyn® HPS * Haemophilus Parasuis Bacterin

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

<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>FD &amp; C Red No. 40</td>
<td>25956-17-6</td>
<td>&lt;1</td>
</tr>
<tr>
<td>sodium:(2-carboxylatophenyl)sulfanyl-ethylmercury</td>
<td>54-64-8</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Haemophilus Parasuis Bacterin (Serovar 4)</td>
<td>Not assigned</td>
<td>*</td>
</tr>
<tr>
<td>Haemophilus Parasuis Bacterin (Serovar 5)</td>
<td>Not assigned</td>
<td>*</td>
</tr>
</tbody>
</table>
Material name: Respisure® HPS Vaccine (Inactivated)

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Composition comments

4. First-aid measures

Description of necessary first aid measures

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
<td>If inhaled, remove to fresh air. If breathing is difficult, trained personnel should give oxygen. If symptoms persist, get medical attention.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists.</td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
<td>Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.</td>
</tr>
</tbody>
</table>

Personal protection for first-aid responders

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct contact with eyes</td>
<td>May cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. 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. If an allergic reaction occurs, the worker should be removed to the nearest emergency room and the appropriate therapy instituted.</td>
</tr>
</tbody>
</table>

5. Fire-fighting measures

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Suitable extinguishing media</strong></td>
<td>Do not use water jet.</td>
</tr>
<tr>
<td><strong>Specific hazards arising from the chemical</strong></td>
<td>During fire, gases hazardous to health may be formed.</td>
</tr>
<tr>
<td><strong>Special protective equipment and precautions for firefighters</strong></td>
<td>Firefighters should wear full protective clothing including self contained breathing apparatus.</td>
</tr>
<tr>
<td><strong>Fire fighting equipment/instructions</strong></td>
<td>During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.</td>
</tr>
<tr>
<td><strong>Hazchem code</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>General fire hazards</strong></td>
<td>No unusual fire or explosion hazards noted.</td>
</tr>
<tr>
<td><strong>Specific methods</strong></td>
<td>Use standard firefighting procedures and consider the hazards of other involved materials.</td>
</tr>
</tbody>
</table>

6. Accidental release measures

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal precautions, protective equipment and emergency procedures</strong></td>
<td>Keep unnecessary personnel away.</td>
</tr>
<tr>
<td><strong>For non-emergency personnel</strong></td>
<td>Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Do not breathe mist or vapour. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.</td>
</tr>
<tr>
<td><strong>Environmental precautions</strong></td>
<td>Use appropriate containment to avoid environmental contamination.</td>
</tr>
<tr>
<td><strong>Methods and materials for containment and cleaning up</strong></td>
<td>Clean up in accordance with all applicable regulations. Ensure adequate ventilation. Remove sources of ignition. Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill area thoroughly. Prevent release to the environment.</td>
</tr>
<tr>
<td><strong>Never return spills to original containers for re-use. Should not be released into the environment.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>For waste disposal, see section 13 of the SDS.</strong></td>
<td></td>
</tr>
</tbody>
</table>
7. Handling and storage

Precautions for safe handling
When handling, use appropriate personal protective equipment (see Section 8). Avoid accidental injection. Avoid contact with eyes. Avoid contact with skin. Avoid breathing mist or vapour. Observe good industrial hygiene practices. Wash thoroughly after handling. Handle and open container with care. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry place out of direct sunlight. Store at 2-7°C. Prolonged exposure to higher temperatures may adversely affect potency. Do not freeze.

8. Exposure controls and personal protection

Control parameters
Follow standard monitoring procedures.

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury (CAS 54-64-8)</td>
<td>STEL</td>
<td>0.03 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury (CAS 54-64-8)</td>
<td>STEL</td>
<td>0.03 mg/m³</td>
</tr>
</tbody>
</table>

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

Exposure guidelines
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. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Opaque liquid</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Reddish white</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100 °C (212 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Non-flammable</td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit – upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Soluble</td>
</tr>
<tr>
<td>Solubility (other)</td>
<td>Solvent: Methanol, Acetone, Diethylether, n-octanol</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

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**
Direct sources of heat. Contact with incompatible materials. Protect from freezing. Avoid exposure to light, sunlight and elevated temperatures.

**Incompatible materials**
As a precautionary measure, keep away from strong oxidizers.

**Hazardous decomposition products**
No hazardous decomposition products are known.

11. Toxicological information

**Information on possible routes of exposure**

**Inhalation**
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

**Skin contact**
Prolonged skin contact may cause temporary irritation.

**Eye contact**
Direct contact with eyes may cause temporary irritation. 

<table>
<thead>
<tr>
<th>Sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury</th>
<th>Species: Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Severity: Mild</td>
</tr>
</tbody>
</table>

**Ingestion**
Expected to be a low ingestion hazard.

**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**
Expected to be a low hazard for usual industrial or commercial handling by trained personnel.
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>FD &amp; C Red No. 40 (CAS 25956-17-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>10000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>10000 mg/kg</td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Mouse</td>
<td>91 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>75 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Subcutaneous</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>98 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Prolonged skin contact may cause temporary irritation.

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

**Eye contact**

sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury (CAS 54-64-8)

**Acute**

Oral
LD50 Mouse 91 mg/kg
LD50 Rat 75 mg/kg
LD50 Rat 98 mg/kg

Respiratory or skin sensitisation

Respiratory sensitisation: Based on available data, the classification criteria are not met.

Skin sensitisation: Based on available data, the classification criteria are not met.

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

Carcinogenicity: Based on available data, the classification criteria are not met. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

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. Releases to the environment should be avoided.

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. Do not allow this material to drain into sewers/water supplies. 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.
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 available.

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. 55215

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
sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury (CAS 54-64-8)

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

Australia Medicines & Poisons Appendix G
sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury (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
sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury (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
sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury (CAS 54-64-8)

Australia Medicines & Poisons Schedule 8
Poisons schedule number not allocated.
Australia Medicines & Poisons Schedule 9
Poison schedule number not allocated.

Australia National Pollutant Inventory (NPI): Threshold quantity
sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury 5 kg Threshold Category: 1B
(CAS 54-64-8)

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
sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury 2000 TONNES/YR Threshold Category: 2B
(CAS 54-64-8)

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
sodium;(2-carboxylatophenyl)sulfanyl-ethylmercury Pesticide
(CAS 54-64-8)

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>

*“Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

Material name: Respisure® HPS Vaccine (Inactivated)

16. Other information

Issue date 10-October-2016
Revision date 07-October-2021
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.

**Disclaimer**

Product and Company Identification: Synonyms
Identification: Restrictions on use
Composition / Information on Ingredients: Disclosure Overrides
Composition/information on ingredients: Composition comments
Accidental release measures: For emergency responders
Accidental release measures: For non-emergency personnel
Toxicological information: Acute toxicity
Toxicological information: Carcinogenicity
Disposal considerations: Disposal methods
Regulatory information: National regulations
Regulatory information: International regulations