1. Identification

Product identifier Ovassay, Ovatec

Other means of identification

Synonyms OVASSAY PLUS diagnostic test kit * OVATEC diagnostic test kit * Ovassay Plus * Ovassay Plus System * Ovassay Kit * Ovatec Plus * Ovatec Plus System * Ovatec Plus diagnostic kit

CAS number 7446-20-0

Recommended use of the chemical and restrictions on use

Recommended use Veterinary product used as diagnostic aid

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 australia.animalhealth@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 Acute toxicity, oral Category 4

Serious eye damage/eye irritation Category 1

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 1

Hazardous to the aquatic environment, long-term hazard Category 1

Label elements, including precautionary statements

Hazard symbol(s)

Corrosion Exclamation mark Environment

Signal word Danger

Hazard statement(s) Harmful if swallowed. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention Wear eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Response IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth. IF IN EYES; Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician. Collect spillage.
Storage
Store away from incompatible materials.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification
May form combustible dust concentrations in air.

Supplemental information
Handle as potentially infectious. May produce corrosive solutions on contact with water.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance</th>
<th>Identity of chemical ingredients</th>
<th>CAS number and other unique identifiers</th>
<th>Concentration of ingredients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovassay, Ovatec</td>
<td>OVASSAY PLUS diagnostic test kit</td>
<td>7446-20-0</td>
<td>&gt;99</td>
</tr>
<tr>
<td></td>
<td>OVATEC diagnostic test kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zinc sulphate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zinc Sulphate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zinc Sulfate 7-Hydrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ovassay Plus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ovassay Plus System</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ovassay Kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ovatec Plus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ovatec Plus System</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ovatec Plus diagnostic kit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**: Wash off with soap and water. Get medical attention if irritation develops and persists.
- **Eye contact**: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing. Call a physician or poison control centre immediately.
- **Ingestion**: If swallowed, do NOT induce vomiting. Rinse mouth. Call a physician or poison control centre immediately. Never give anything by mouth to an unconscious person.

Personal protection for first-aid responders
For personal protection, see section 8 of the SDS. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Symptoms caused by exposure
Dusts may irritate the respiratory tract, skin and eyes. May cause temporary blindness and severe eye damage.

Medical attention and special treatment
Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

- **Suitable extinguishing media**: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media carefully to avoid creating airborne dust.
- **Unsuitable extinguishing media**: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed. Avoid generating airborne dust. High concentration of airborne dust may form explosive mixture with air. May produce corrosive solutions on contact with water.

Special protective equipment and precautions for fire fighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

Hazchem Code
None.

General fire hazards
May form combustible dust concentrations in air. Fine particles (such as mists) may fuel fires/explosions. Fire may produce toxic or corrosive gases.

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. Local authorities should be advised if significant spillages cannot be contained.

**For emergency responders**
Wear appropriate protective equipment and clothing during clean-up. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ventilate the contaminated area. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. May produce corrosive solutions on contact with water.

**Environmental precautions**
May produce corrosive solutions on contact with water. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**Methods and materials for containment and cleaning up**
The standard biosafety practices for handling infectious materials should be followed. Ensure adequate ventilation. Avoid the generation of dusts during clean-up. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Collect spill with an inert, non-combustible absorbent material and transfer to labeled container for disposal. Clean contaminated surface thoroughly. Prevent release to the environment.

Small Spills: Wipe up with a damp cloth and place in container for disposal. 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**
The standard biosafety practices for handling infectious materials should be followed. Use with adequate ventilation. Minimise dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. When handling, use appropriate personal protective equipment (see Section 8).

**Conditions for safe storage, including any incompatibilities**
Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). hygroscopic. Protect from moisture.

8. Exposure controls and personal protection

**Control parameters**
Follow standard monitoring procedures.

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovassay, Ovatec (CAS 7446-20-0)</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>Respirable fraction.</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. Provide eyewash station.

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

- **Eye/face protection**
  Wear safety glasses with side shields (or goggles). Face shield is recommended.

- **Skin protection**
  Wear impervious gloves if skin contact is possible.

- **Hand protection**
  Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.
Respiratory protection: No personal respiratory protective equipment normally required. Respiratory protection should be provided in instances where exposure to dust, mists, aerosols or vapors are likely.

Thermal hazards: Not applicable.

Hygiene measures: When using, do not eat, drink or smoke. 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**
- Crystalline. or Granular. Powder.

**Physical state**
- Solid.

**Form**
- Powder.

**Colour**
- Colourless. or White.

**Odour**
- Odourless.

**Odour threshold**
- Not available.

**pH**
- 4 - 6 (50 g/l, @ 20°C/68°F)

**Melting point/freezing point**
- > 500 °C (> 932 °F)

**Initial boiling point and boiling range**
- Not available.

**Flash point**
- Not available.

**Evaporation rate**
- Not available.

**Flammability (solid, gas)**
- Not available.

**Upper/lower flammability or explosive limits**
- 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)**
  - 965 g/l (@ 20°C/68°F)

**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**
  - 1.96

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. May produce corrosive solutions on contact with water. Keep away from heat, sparks and open flame. Minimise dust generation and accumulation. Dust may form explosive mixture with air. Fine particles (such as dust and mists) may fuel fires/explosions.

**Incompatible materials**
- Strong oxidising agents. Water, moisture.

**Hazardous decomposition products**
- Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Sulfuric acid. Sulphur oxides. Zinc oxide.

11. Toxicological information

**Information on possible routes of exposure**

- **Inhalation**
  - Dust may irritate respiratory system. Prolonged inhalation may be harmful.

- **Skin contact**
  - Dust or powder may irritate the skin.
Eye contact
Severity: Severe
Causes serious eye damage.

Ingestion
Harmful if swallowed. Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Symptoms related to exposure
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes.

Acute toxicity
Harmful if swallowed.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovassay, Ovatec (CAS 7446-20-0)</td>
<td>Oral</td>
<td>1260 mg/kg 623 mg/kg</td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
May be irritating to the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Serious eye damage/irritation
Causes serious eye damage.

Eye contact
Severity: Severe

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

Aspiration hazard
Not an aspiration hazard.

Chronic effects
May cause damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity
Avoid release to the environment. Very toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovassay, Ovatec (CAS 7446-20-0)</td>
<td>Crustacea</td>
<td>0.3 mg/l, 48 hours</td>
</tr>
<tr>
<td>Aquatic</td>
<td>Rotifer (Philodina acuticornis)</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>Rainbow trout,donaldson trout (Oncorhynchus mykiss)</td>
<td>0.103 mg/l, 96 hours</td>
</tr>
<tr>
<td>LC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Bioaccumulative potential
No data available.

Mobility in soil
This product is miscible in water.

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
Handle as potentially infectious. Avoid release to the environment. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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 (see: Disposal instructions).

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
| UN number | 3077 |
| Transport hazard class(es) | Environmentally hazardous substance, solid, n.o.s (Zinc sulphate) |
| Class | 9 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | Yes |

IATA
| UN number | 3077 |
| Transport hazard class(es) | Environmentally Hazardous Substance, Solid, n.o.s (ZINC SULFATE) |
| Class | 9 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | Yes |

IMDG
| UN number | 3077 |
| Transport hazard class(es) | Environmentally Hazardous Substance, Solid, n.o.s (ZINC SULFATE), MARINE POLLUTANT (ZINC SULFATE) |
| Class | 9 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | Yes |
| Marine pollutant | Yes |
| EmS | Not available. |

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.
As of January 1, 2015, materials offered for transport that are classified for transportation only as Marine Pollutants and which are packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 Liters or less for liquids or having a net mass per single or inner packaging of 5 kilograms or less for solids are NOT subject to ICAO/IATA, IMDG, or ADR transport regulations provided the general packaging requirements of those regulations are met. Refer to ICAO/IATA A197, IMDG 2.10.2.7, ADR SP 375. Please refer to the applicable dangerous goods regulations for additional information. Transport according to the requirements of the appropriate regulatory body.

15. Regulatory information

Safety, health and environmental regulations

National regulations

This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

Australia Medicines & Poisons Appendix E
Zinc sulphate (CAS 7446-20-0)

Australia Medicines & Poisons Appendix F
Zinc sulphate (CAS 7446-20-0)

Australia Medicines & Poisons Schedule 4
ZINC COMPOUNDS (CAS 7446-20-0)

Australia Medicines & Poisons Schedule 6
Zinc sulphate (CAS 7446-20-0)

Australia National Pollutant Inventory (NPI): Threshold quantity
Ovassay, Ovatec (CAS 7446-20-0) 10 TONNES/YR Threshold Category: 1

High Volume Industrial Chemicals (HVIC)
Ovassay, Ovatec (CAS 7446-20-0) 1000 - 9999 TONNES See the regulation for additional information.

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

<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 Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</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>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
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<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</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-March-2017

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 This document has undergone significant changes and should be reviewed in its entirety.