SAFETY DATA SHEET

1. Identification

Product identifier: SERELISA BVD p80 Ag Mono Indirect

Other means of identification: None.

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

- Flammable liquids: Category 3

Health hazards

- Acute toxicity, oral: Category 4
- Acute toxicity, dermal: Category 4
- Acute toxicity, inhalation: Category 4
- Skin corrosion/irritation: Category 1
- Serious eye damage/eye irritation: Category 1
- Specific target organ toxicity following single exposure: Category 1 (central nervous system, eyes)
- Specific target organ toxicity following repeated exposure: Category 1 (kidney, liver)

Environmental hazards: Not classified.

Label elements, including precautionary statements

Hazard symbol(s)

- Flame
- Corrosion
- Health hazard
- Exclamation mark

Signal word: Danger

Hazard Statement(s)

- Flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. Harmful if inhaled. Causes damage to organs (central nervous system, eyes). Causes damage to organs (kidney, liver) through prolonged or repeated exposure.

Precautionary Statement(s)

Prevention

- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Do not breathe mist or vapour. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Wash contaminated clothing before reuse. In case of fire: Use appropriate media for extinction.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

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

Other hazards which do not result in classification

None known.

Supplemental information

Handle as potentially infectious. Vapours may cause drowsiness and dizziness. Exposure to strong inorganic mists containing sulfuric acid may cause cancer by inhalation. See section 11 for further explanation.

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>Acetone (Peroxydase Substrate)</td>
<td>67-64-1</td>
<td>&lt;5*</td>
</tr>
<tr>
<td>Methanol (Peroxydase Substrate)</td>
<td>67-56-1</td>
<td>&lt;25*</td>
</tr>
<tr>
<td>Sulfuric Acid (Stop Solution)</td>
<td>7664-93-9</td>
<td>&lt;20*</td>
</tr>
<tr>
<td>Thimerosal</td>
<td>54-64-8</td>
<td>&lt;0.1*</td>
</tr>
</tbody>
</table>

Composition comments

*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

Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist. Call a POISON CENTRE or doctor/physician if you feel unwell.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion

Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn’t get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions.

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. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Handle as potentially infectious.

Symptoms caused by exposure


Medical attention and special treatment

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
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.

Hazchem Code

None.

General fire hazards

Flammable liquid and vapour.

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

Do not breathe mist or vapour. Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

For emergency responders

Handle as potentially infectious. Do not breathe mist or vapour. 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 touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions

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

Ensure adequate ventilation. Avoid inhalation of vapours or mists. 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: Absorb spillage with non-combustible, absorbent material. 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

Flammable liquid and vapour. Vapours may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Corrosive material. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Do not use in areas without adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains. Observe good industrial hygiene practices. Handle as potentially infectious.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place. 2 - 8°C (36 - 46˚F). Do not freeze. Store locked up. Protect from sunlight. Do not handle or store near an open flame, heat or other sources of ignition. Store away from incompatible materials (see Section 10 of the SDS). Use care in handling/storage.

8. Exposure controls and personal protection

Control parameters

Follow standard monitoring procedures.

Occupational exposure limits

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (Peroxydase Substrate) (CAS 67-64-1)</td>
<td>STEL</td>
<td>2375 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1185 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
</tr>
<tr>
<td>Methanol (Peroxydase Substrate) (CAS 67-56-1)</td>
<td>STEL</td>
<td>328 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>250 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>262 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm</td>
</tr>
</tbody>
</table>
### Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfuric Acid (Stop Solution) (CAS 7664-93-9)</td>
<td>STEL</td>
<td>3 mg/m³</td>
</tr>
<tr>
<td>Thimerosal (CAS 54-64-8)</td>
<td>STEL</td>
<td>0.03 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.01 mg/m³</td>
</tr>
</tbody>
</table>

### Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (Peroxydase Substrate) (CAS 67-64-1)</td>
<td>STEL</td>
<td>2375 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Methanol (Peroxydase Substrate) (CAS 67-56-1)</td>
<td>STEL</td>
<td>328 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>250 ppm</td>
</tr>
<tr>
<td>Sulfuric Acid (Stop Solution) (CAS 7664-93-9)</td>
<td>STEL</td>
<td>3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m³</td>
</tr>
<tr>
<td>Thimerosal (CAS 54-64-8)</td>
<td>STEL</td>
<td>0.03 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.01 mg/m³</td>
</tr>
</tbody>
</table>

### US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (Peroxydase Substrate) (CAS 67-64-1)</td>
<td>STEL</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Methanol (Peroxydase Substrate) (CAS 67-56-1)</td>
<td>TWA</td>
<td>250 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>250 ppm</td>
</tr>
<tr>
<td>Sulfuric Acid (Stop Solution) (CAS 7664-93-9)</td>
<td>TWA</td>
<td>200 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td>Thimerosal (CAS 54-64-8)</td>
<td>STEL</td>
<td>0.03 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.01 mg/m³</td>
</tr>
</tbody>
</table>

### UK. EH40 Workplace Exposure Limits (WELs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (Peroxydase Substrate) (CAS 67-64-1)</td>
<td>STEL</td>
<td>3620 mg/m³</td>
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<tr>
<td></td>
<td>TWA</td>
<td>1500 ppm</td>
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<tr>
<td></td>
<td></td>
<td>1210 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
</tr>
<tr>
<td>Methanol (Peroxydase Substrate) (CAS 67-56-1)</td>
<td>STEL</td>
<td>333 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>250 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>266 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm</td>
</tr>
<tr>
<td>Sulfuric Acid (Stop Solution) (CAS 7664-93-9)</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
</tr>
</tbody>
</table>

### Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (Peroxydase Substrate) (CAS 67-64-1)</td>
<td>TWA</td>
<td>1200 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
</tr>
</tbody>
</table>
Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol (Peroxydase Substrate) (CAS 67-56-1)</td>
<td>TWA</td>
<td>270 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Sulfuric Acid (Stop Solution) (CAS 7664-93-9)</td>
<td>TWA</td>
<td>200 ppm</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

Biological limit values

Germany. TRGS 903, BAT List (Biological Limit Values)

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (Peroxydase Substrate) (CAS 67-64-1)</td>
<td>80 mg/l</td>
<td>Acetone</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td>Methanol (Peroxydase Substrate) (CAS 67-56-1)</td>
<td>30 mg/l</td>
<td>Methanol</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (Peroxydase Substrate) (CAS 67-64-1)</td>
<td>25 mg/l</td>
<td>Acetone</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td>Methanol (Peroxydase Substrate) (CAS 67-56-1)</td>
<td>15 mg/l</td>
<td>Methanol</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Exposure guidelines

Australia OELs: Skin designation

- Methanol (Peroxydase Substrate) (CAS 67-56-1) Can be absorbed through the skin.
- Thimerosal (CAS 54-64-8) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

- Methanol (Peroxydase Substrate) (CAS 67-56-1) Can be absorbed through the skin.
- Thimerosal (CAS 54-64-8) Can be absorbed through the skin.

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. 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. Eye wash facilities and emergency shower must be available when handling this product.

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

**Eye/face protection**

- Wear safety glasses with side shields (or goggles) and a face shield.

**Skin protection**

- **Hand protection**
  - Wear appropriate chemical resistant gloves.

- **Other**
  - Wear suitable protective clothing. 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

**Appearance**

- **Physical state**
  - Liquid.

- **Form**
  - Liquid.

- **Colour**
  - Not available.

Material name: SERELISA BVD p80 Ag Mono Indirect

SDS AUSTRALIA
3296
5 / 10
Odour threshold Not available.
PHT  
\(< 1 \) (Stop Solution)
Melting point/freezing point  
\(2 \, ^\circ C \ (35.6 \, ^\circ F)\) (Stop Solution)
Initial boiling point and boiling range  
\(135 \, ^\circ C \ (275 \, ^\circ F)\) (Stop Solution)
Flash point  
\(31.0 \, ^\circ C \ (87.8 \, ^\circ F)\) (Peroxydase Substrate)
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) Not available.
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.

10. Stability and reactivity
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport. Reacts violently with strong alkaline substances. This product may react with reducing agents.
Chemical stability Stable under normal conditions of use.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use. Hazardous polymerisation does not occur.
Conditions to avoid Contact with incompatible materials. Do not mix with other chemicals. Avoid temperatures exceeding the flash point. Protect from sunlight. Keep away from heat, spark, open flames and other sources of ignition. Keep away from combustible material.
Hazardous decomposition products Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Thermal decomposition products may include oxides of carbon, nitrogen, and sulfur.

11. Toxicological information
Information on possible routes of exposure
  
Inhalation Harmful if inhaled. May cause drowsiness and dizziness. May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact Causes severe skin burns. Harmful in contact with skin.
  
Sulfuric Acid (Stop Solution)  
  
Severity: Severe
Eye contact Causes serious eye damage.
Eye contact
Sulfuric Acid (Stop Solution) Severity: Severe
Thimerosal Species: Rabbit Severity: Mild
Acetone (Peroxydase Substrate) Species: Rabbit Severity: Moderate

Ingestion
Causes digestive tract burns. Harmful if swallowed.

Symptoms related to exposure

Acute toxicity
Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed.

Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfuric Acid (Stop Solution) (CAS 7664-93-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>510 mg/m3, 2 hours</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>2140 mg/kg</td>
</tr>
<tr>
<td>Thimerosal (CAS 54-64-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></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><strong>Subcutaneous</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>98 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes severe skin burns and eye damage.</td>
<td></td>
</tr>
<tr>
<td><strong>Corrosivity</strong></td>
<td>Sulfuric Acid (Stop Solution) Severity: Corrosive</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye damage.</td>
<td></td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
<td>Sulfuric Acid (Stop Solution) Severity: Severe</td>
<td></td>
</tr>
<tr>
<td>Thimerosal Species: Rabbit Severity: Mild</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetone (Peroxydase Substrate) Species: Rabbit Severity: Moderate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 Based on available data, the classification criteria are not met. The International Agency for Research on Cancer (IARC) and the United States National Toxicology Program (NTP) have classified 'occupational exposure to strong inorganic acid mists containing sulfuric acid' as a known human carcinogen. This classification applies only to sulfuric acid when generated as a mist. This classification is debated within the scientific community and there is disagreement as to whether or not a cause and effect relationship between cancer and 'occupational exposure to strong inorganic acid mists containing sulfuric acid' exists.

ACGIH Carcinogens
Acetone (Peroxydase Substrate) (CAS 67-64-1) A4 Not classifiable as a human carcinogen.
Sulfuric Acid (Stop Solution) (CAS 7664-93-9) is a suspected human carcinogen. IARC Monographs. Overall Evaluation of Carcinogenicity states that Sulfuric Acid (Stop Solution) (CAS 7664-93-9) is carcinogenic to humans.

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

### Specific target organ toxicity - single exposure
Causes damage to organs (central nervous system, eyes).

### Specific target organ toxicity - repeated exposure
Causes damage to organs (kidney, liver) through prolonged or repeated exposure.

### Aspiration hazard
Not an aspiration hazard.

### Chronic effects
Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

### 12. Ecological information

#### Ecotoxicity
Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. Avoid release to the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (Peroxydase Substrate) (CAS 67-64-1)</td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss)</td>
</tr>
<tr>
<td>Methanol (Peroxydase Substrate) (CAS 67-56-1)</td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas)</td>
</tr>
<tr>
<td>Sulfuric Acid (Stop Solution) (CAS 7664-93-9)</td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>EC50</td>
<td>Daphnia magna (Water Flea)</td>
<td>29 mg/l, 24 Hours</td>
</tr>
<tr>
<td>LC50</td>
<td>Brachydanio rerio (Zebra fish)</td>
<td>&gt; 500 mg/l, 96 Hours</td>
</tr>
<tr>
<td>Algae</td>
<td>ErC50</td>
<td>Algae</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Bluegill (Lepomis macrochirus)</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
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. Do not discharge into drains, water courses or onto the ground. Handle as potentially infectious.

Waste may be classified as hazardous due to the pH/corrosivity. 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. Do not re-use empty containers.
14. Transport information

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

This product contains 2 separately packaged, non-reactive hazardous materials (Sulfuric Acid Stop Solution and Peroxydase Substrate) that each meet the definition of a dangerous good (DG) for transport. The DG descriptions for each container are included hereunder.

The Sulfuric Acid Stop Solution DG description is Sulfuric acid solution, UN2796, 8, II.

The Peroxydase Substrate DG description is Flammable liquids, n.o.s. (Methanol, Acetone), UN1993, 3, III.

Both materials, when packaged in inner containers of 30 milliliters or less, can qualify for the Excepted Quantity provisions of the transport regulations. Refer to the ICAO/IATA, IMDG, ADR, and US DOT regulations for details.

If Peroxydase Substrate is packaged in a container >30 milliliters but ≤ 50 milliliters, this material and, as such, this kit can qualify for the Limited Quantity provisions of the ground, ocean (sea) and air transport regulations.

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

ACETONE (CAS 67-64-1)
Mercury, organic compounds (CAS 54-64-8)
METHANOL (CONC>10%) (CAS 67-56-1)
SULFURIC ACID (CAS 7664-93-9)

Australia Medicines & Poisons Appendix F

ACETONE (CAS 67-64-1)
METHANOL, EXCEPT IN METHYLATED SPIRIT (CAS 67-56-1)
SULFURIC ACID (CAS 7664-93-9)

Australia Medicines & Poisons Appendix G

Mercury (CAS 54-64-8)

Australia Medicines & Poisons Schedule 2

Mercury (CAS 54-64-8)

Australia Medicines & Poisons Schedule 5

ACETONE (CAS 67-64-1)
METHANOL (EXCLUDING ITS DERIVATIVES) (CAS 67-56-1)

Australia Medicines & Poisons Schedule 6

METHANOL (EXCLUDING ITS DERIVATIVES) (CAS 67-56-1)
SULFURIC ACID (EXCLUDING ITS SALTS AND DERIVATIVES) (CAS 7664-93-9)

Australia Medicines & Poisons Schedule 7

MERCURY, EXCEPT WHEN SEPARATELY SPECIFIED IN THIS SCHEDULE (CAS 54-64-8)

Australia National Pollutant Inventory (NPI): Threshold quantity

Acetone (Peroxydase Substrate) (CAS 67-64-1) 10 TONNES/YR Threshold Category: 1
Methanol (Peroxydase Substrate) (CAS 67-56-1) 10 TONNES/YR Threshold Category: 1
Sulfuric Acid (Stop Solution) (CAS 7664-93-9) 10 TONNES/YR Threshold Category: 1
Thimerosal (CAS 54-64-8) 5 kg Threshold Category: 1B

High Volume Industrial Chemicals (HVIC)

Acetone (Peroxydase Substrate) (CAS 67-64-1) 1000 - 9999 TONNES See the regulation for additional information.
Methanol (Peroxydase Substrate) (CAS 67-56-1) 10000 - 99999 TONNES See the regulation for additional information.
Sulfuric Acid (Stop Solution) (CAS 7664-93-9) > 1000000 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

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

Country(s) or region | Inventory name | On inventory (yes/no)*
--- | --- | ---
Australia | Australian Inventory of Chemical Substances (AICS) | Yes
Canada | Domestic Substances List (DSL) | Yes
Canada | Non-Domestic Substances List (NDSL) | No
China | Inventory of Existing Chemical Substances in China (IECSC) | Yes
Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes
Europe | European List of Notified Chemical Substances (ELINCS) | No
Japan | Inventory of Existing and New Chemical Substances (ENCS) | No
Korea | Existing Chemicals List (ECL) | No
New Zealand | New Zealand Inventory | Yes
Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No
United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes

* 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
23-December-2016

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
Product and Company Identification: Alternate Trade Names
First-aid measures: Personal protection for first-aid responders
Disposal considerations: Disposal methods
Disposal considerations: Contaminated packaging
GHS: Qualifiers