SAFETY DATA SHEET

1. Identification

Product identifier: Zoetis Teat Disinfecting Wipes
Other means of identification: None.

Recommended use of the chemical and restrictions on use

Recommended use: Veterinary product used as medicated wipe
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 2
Health hazards: Serious eye damage/eye irritation Category 2A
Sensitization, skin Category 1
Environmental hazards: Hazardous to the aquatic environment, acute hazard Category 2

Label elements, including precautionary statements

Hazard symbol(s)

Flame Exclamation mark

Signal word: Danger

Hazard Statement(s): Highly flammable liquid and vapour. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life.

Precautionary Statement(s)


Response: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media for extinction.

Storage: Store in a well-ventilated place. Keep cool.

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
This product contains a flammable liquid absorbed onto an inert solid material (wipe). Vapours may cause drowsiness and dizziness. For handling flammable liquids, in industrial setting: Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixture</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>Ethanol</td>
<td></td>
<td>64-17-5</td>
<td>70</td>
</tr>
<tr>
<td>Cetrimonium Bromide</td>
<td></td>
<td>57-09-0</td>
<td>0.16</td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
<td>Balance</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**
Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

**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. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Get medical attention if symptoms occur.

**Personal protection for first-aid responders**
For personal protection, see section 8 of the SDS. IF exposed or concerned: Get medical advice/attention. Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

**Symptoms caused by exposure**
Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. May cause an allergic skin reaction. Dermatitis. Rash.

**Medical attention and special treatment**
Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. 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**
1 Z

**General fire hazards**
Flammable substance. Highly 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**
Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained.
For emergency responders

- Ensure adequate ventilation. 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). Ground container and transfer equipment to eliminate static electric sparks. 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. Use personal protection recommended in Section 8 of the SDS.

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

- Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Clean surface thoroughly to remove residual contamination.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later 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

- Flammable substance. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Use this product with adequate ventilation. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Wash thoroughly after handling. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. When applicable: All equipment used when handling the product must be grounded. Take precautionary measures against static discharges. Use non-sparking tools when opening or closing containers.

Conditions for safe storage, including any incompatibilities

- This material can accumulate static charge which may cause spark and become an ignition source. Do not handle or store near an open flame, heat or other sources of ignition. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers. Keep away from food, drink and animal feeding stuffs. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children. When applicable: Prevent electrostatic charge build-up by using common bonding and grounding techniques.

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>Ethanol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1880 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</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>Ethanol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1880 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</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>Ethanol (CAS 64-17-5)</td>
<td>STEL</td>
<td>1000 ppm</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>Ethanol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1920 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 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)

Components | Type | Value
--- | --- | ---
Ethanol (CAS 64-17-5) | TWA | 960 mg/m³
 |  | 500 ppm

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

Control banding approach
Not available.

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 fountain and emergency showers are recommended.

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

Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection
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. Whenever air contamination (mist, vapor or odor) is generated, respiratory protection is recommended as a precaution to minimize exposure. Chemical respirator with organic vapour cartridge.

Thermal hazards
Not applicable.

Hygiene measures
When using do not 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance
Clear, slightly yellow liquid absorbed onto wipes

Physical state
Solid.

Form
Solid.

Colour
Slightly yellow

Odour
Characteristic alcohol odor

Odour threshold
Not available.

pH
5.5 (Ethanol)

Melting point/freezing point
Not available.

Initial boiling point and boiling range
78 °C (172.4 °F) (Ethanol)

Flash point
13.0 °C (55.4 °F) (Ethanol)

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

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
5.3 kPa @ 20C (Ethanol)

Vapour density
Not available.

Relative density
Not available.
Solubility(ies)

Solubility (water) Soluble

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.

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. Flammable substance. Keep away from heat, spark, open flames and other sources of ignition.


Hazardous decomposition products Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Nitrogen oxides (NOx). Carbon oxides. Hydrogen bromide.

11. Toxicological information

Information on possible routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Species: Rabbit
Severity: Severe

Ingestion Expected to be a low ingestion hazard.

Symptoms related to exposure Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing. May cause an allergic skin reaction. Dermatitis. Rash.

Acute toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50 Mouse</td>
<td>39 g/m³, 4 hours</td>
<td></td>
</tr>
<tr>
<td>Rat</td>
<td>20000 ppm, 10 hours</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 Mouse</td>
<td>3450 g/m³ Intravitreal (eye)</td>
<td></td>
</tr>
<tr>
<td>Rat</td>
<td>7060 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50 Rat</td>
<td>20000 mg/l Intravitreal (eye)</td>
<td></td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td>Prolonged skin contact may cause temporary irritation.</td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Causes serious eye irritation.</td>
<td></td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethanol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species: Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severity: Severe</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitisation</strong></td>
<td>Not a respiratory sensitizer.</td>
<td></td>
</tr>
</tbody>
</table>
Cetrimonium bromide is known to be a contact sensitiser. May cause an allergic skin reaction.

Skin sensitisation
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

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

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

Reproductive toxicity
Not classified.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not an aspiration hazard.

Chronic effects
Prolonged inhalation may be harmful.

12. Ecological information
Ecotoxicity
Toxic to aquatic life. Avoid release to the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>Fingerling Trout</td>
<td>LC50 11200 mg/l, 24 Hours</td>
</tr>
<tr>
<td></td>
<td>Oncorhynchus mykiss (Rainbow Trout)</td>
<td>12900 mg/l, 96 Hours</td>
</tr>
<tr>
<td></td>
<td>Pimephales promelas (Fathead Minnow)</td>
<td>14200 mg/l, Hours</td>
</tr>
<tr>
<td>Aquatic</td>
<td>Water flea (Daphnia magna)</td>
<td>EC50 7.7 - 11.2 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>Fathead minnow (Pimephales promelas)</td>
<td>LC50 &gt; 100 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
No data available for this product.

Bioaccumulative potential
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
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information
ADG
UN number: 3175
UN proper shipping name: Solids containing flammable liquid, n.o.s. (Ethanol)
Transport hazard class(es)
Class: 4.1
Subsidiary risk: -
Packing group: II
Environmental hazards: Not available.
Hazchem Code: 1Z
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling. Also refer to the General information statements below in this section.

RID
UN number: 3175
UN proper shipping name: Solids containing flammable liquid, n.o.s. (Ethanol)
Transport hazard class(es)

Class 4.1
Subsidiary risk -
Label(s) 4.1
Packing group II
Environmental hazards No.

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling. Also refer to the General information statements below in this section.

IATA
UN number 3175
UN proper shipping name Solids containing flammable liquid, n.o.s. (Ethanol)
Transport hazard class(es)

Class 4.1
Subsidiary risk -
Packing group II
Environmental hazards No.
ERG Code 3L

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling. Also refer to the General information statements below in this section.

Other information
Passenger and cargo aircraft
Allowed with restrictions.
Cargo aircraft only
Allowed with restrictions.

IMDG
UN number 3175
UN proper shipping name SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (Ethanol)
Transport hazard class(es)

Class 4.1
Subsidiary risk -
Packing group II
Environmental hazards No.
Marine pollutant
EmS F-A, S-I

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling. Also refer to the General information statements below in this section.
Not applicable.

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

ADG

Material name: Zoetis Teat Disinfecting Wipes
3317
General information
Limited Quantity (LTD.QTY.) (container size < 1 kg). Limited Quantity Exceptions apply to small quantities packed in combination packaging. See applicable modal regulations for specific limitations.

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 B
ALCOHOL, DEHYDRATED (CAS 64-17-5)

Australia National Pollutant Inventory (NPI): Threshold quantity
Ethanol (CAS 64-17-5) 10 TONNES/YR Threshold Category: 1

High Volume Industrial Chemicals (HVIC)
Ethanol (CAS 64-17-5) 10000 - 99999 TONNES See the regulation for additional information.
Water (CAS 7732-18-5) 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

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) | Yes
Korea | Existing Chemicals List (ECL) | Yes
New Zealand | New Zealand Inventory | Yes
Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes

---

Material name: Zoetis Teat Disinfecting Wipes
3317

SDS AUSTRALIA
8 / 9
<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<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-November-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.