

SAFETY DATA SHEET



1. Identification

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|--|---|
| Product identifier | Poulvac Marek Diluent |
| Other means of identification | |
| Synonyms | POULVAC® * Poulvac Sterile Diluent |
| Recommended use of the chemical and restrictions on use | |
| Recommended use | Veterinary vaccine Sterile diluent |
| 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 | 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 In the event of accidental injection, an allergic reaction may occur. Direct contact with eyes may cause temporary irritation.

3. Composition/information on ingredients

Mixture

| Identity of chemical ingredients | CAS number and other unique identifiers | Concentration of ingredients |
|------------------------------------|---|------------------------------|
| Phenol Red (Phenolsulfonphthalein) | 143-74-8 | <0.1 |
| Potassium phosphate | 7778-77-0 | <1* |
| Sucrose | 57-50-1 | * |
| Water for injection | 7732-18-5 | * |

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

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| 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 | Rinse with water. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| Personal protection for first-aid responders | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |
| Symptoms caused by exposure | Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort. |
| Medical attention and special treatment | Treat symptomatically. |

5. Fire-fighting measures

Extinguishing media

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|---|---|
| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| 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. |
| 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 | Move containers from fire area if you can do so without risk. |
| Hazchem Code | None. |
| General fire hazards | No unusual fire or explosion hazards noted. |
| 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

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|--|--|
| For non-emergency personnel | Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. |
| For emergency responders | Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS. |
| Environmental precautions | Avoid discharge into drains, water courses or onto the ground. |
| Methods and materials for containment and cleaning up | Large Spills: Stop the flow of material, if this is without risk. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |

7. Handling and storage

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|---|---|
| Precautions for safe handling | Avoid accidental injection. Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapour. Wash thoroughly after handling. When using, do not eat, drink or smoke. Wear personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Store at room temperature. Do not freeze. Store in original tightly closed container. Keep away from heat, sparks and open flame. Store away from incompatible materials (see Section 10 of the SDS). |

8. Exposure controls and personal protection

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|---------------------------|--|
| Control parameters | Follow standard monitoring procedures. |
|---------------------------|--|

Occupational exposure limits

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

| Components | Type | Value | Form |
|-----------------------|------|----------------------|-----------------|
| Sucrose (CAS 57-50-1) | TWA | 10 mg/m ³ | Inhalable dust. |

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

| Components | Type | Value | Form |
|-----------------------|------|----------------------|------------------|
| Sucrose (CAS 57-50-1) | TWA | 10 mg/m ³ | Inspirable dust. |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|-----------------------|------|----------------------|
| Sucrose (CAS 57-50-1) | TWA | 10 mg/m ³ |

UK. EH40 Workplace Exposure Limits (WELs)

| Components | Type | Value |
|-----------------------|------|----------------------|
| Sucrose (CAS 57-50-1) | STEL | 20 mg/m ³ |
| | TWA | 10 mg/m ³ |

Biological limit values

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

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate.

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

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

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. If ventilation is insufficient, suitable respiratory protection must be provided. 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 Reddish

Odour Not available.

Odour threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

| | |
|--|----------------|
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit – upper (%) | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | 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

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|---|---|
| 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. |
| Incompatible materials | Strong oxidising agents. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on possible routes of exposure

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|-------------------------------------|---|
| Inhalation | Health injuries are not known or expected under normal use. |
| Skin contact | Prolonged skin contact may cause temporary irritation. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| 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. |

Acute toxicity

| Components | Species | Test results |
|---|--|--------------|
| Phenol Red (Phenolsulfonphthalein) (CAS 143-74-8) | | |
| Acute | | |
| Intravenous | | |
| LD50 | Rat | 752 mg/kg |
| Subcutaneous | | |
| LD50 | Rat | > 600 mg/kg |
| Sucrose (CAS 57-50-1) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 29.7 g/kg |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. | |
| Serious eye damage/irritation | Direct contact with eyes may cause temporary irritation. | |

Respiratory or skin sensitisation

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.

Mutagenicity

Sucrose

Bacterial Mutagenicity (Ames)
Result: negative
Species: Salmonella

Phenol Red (Phenolsulfonphthalein)

Bacterial Mutagenicity (Ames)
Result: positive
Species: Salmonella

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

ACGIH Carcinogens

Sucrose (CAS 57-50-1)

A4 Not classifiable as a human carcinogen.

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

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects None known. Health injuries are not known or expected under normal use.

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. Avoid release to the environment.

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

Bioaccumulative potential

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. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable 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

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

Safety, health and environmental regulations

National regulations

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

This SDS replaces version: Issued November, 2015

Australia Medicines & Poisons Appendix E

ALKALINE SALTS (CAS 7778-77-0)

Australia Medicines & Poisons Appendix F

ALKALINE SALTS (CAS 7778-77-0)

Australia Medicines & Poisons Schedule 10

ALKALINE SALTS, BEING THE CARBONATE, SILICATE OR PHOSPHATE SALTS OF SODIUM OR POTASSIUM ALONE OR IN ANY COMBINATION (CAS 7778-77-0)

Australia Medicines & Poisons Schedule 5

ALKALINE SALTS, BEING THE CARBONATE, SILICATE OR PHOSPHATE SALTS OF SODIUM OR POTASSIUM ALONE OR IN ANY COMBINATION, EXCEPT WHEN SEPARATELY SPECIFIED IN THESE SCHEDULES (CAS 7778-77-0)

Australia Medicines & Poisons Schedule 6

ALKALINE SALTS, BEING THE CARBONATE, SILICATE OR PHOSPHATE SALTS OF SODIUM OR POTASSIUM ALONE OR IN ANY COMBINATION, EXCEPT WHEN SEPARATELY SPECIFIED IN THESE SCHEDULES (CAS 7778-77-0)

High Volume Industrial Chemicals (HVIC)

Water for injection (CAS 7732-18-5)

1000 - 9999 TONNES See the regulation for additional information.

Importation of Ozone Depleting 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) | No |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*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

| | |
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| Issue date | 20-September-2016 |
| Revision date | 22-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 | Handling and storage: Conditions for safe storage, including any incompatibilities |