SAFETY DATA SHEET

1. Identification

Product identifier
Depo-Medrol®

Other means of identification

Synonyms
Depo-Medrol® methylprednisolone acetate injectable suspension USP *
Depo-Medrol® methylprednisolone acetate sterile aqueous suspension *
DEPO MEDROL® Injectable Corticosteroid *
Methylprednisolone Acetate Suspension, 20 and 40 mg/ml

Recommended use
Veterinary product used as anti-inflammatory agent

Recommended restrictions
Not for human use

Manufacturer/Importer/Supplier/Distributor information

Company Name (USA)
Zoetis Inc.
10 Sylvan Way
Parsippany, New Jersey 07054 (USA)
1-866-531-8896

Rocky Mountain Poison and Drug Center
Product Support/Technical Services
1-800-366-5288

Emergency telephone numbers
CHEMTREC (24 hours): 1-800-424-9300
International CHEMTREC (24 hours): +1-703-527-3887

Company Name (CA)
Zoetis Canada Inc.
16740 Trans-Canada Highway
Kirkland, Quebec, H9H 4M7

Emergency telephone number
International CHEMTREC (24 hours): +1-703-527-3887

Contact E-Mail
productsupport@zoetis.com

Product Support
1-800-461-0917

All Safety Data Sheets are available via our Zoetis Canada website at https://www.zoetis.ca/sds/sds.aspx

Supplier
Not available.

2. Hazard(s) identification

Physical hazards
Not classified.

Health hazards
Reproductive toxicity (the unborn child) Category 1A
Specific target organ toxicity following repeated exposure Category 2 (Adrenal gland, blood forming organs)

Environmental hazards
Not classified.

Label elements

Signal word
Danger

Hazard statement
May damage the unborn child. May cause damage to organs (Adrenal gland, blood forming organs) through prolonged or repeated exposure.

Precautionary statement
Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapour. Wear protective gloves/protective clothing/eye protection/face protection.
Response
IF exposed or concerned: Get medical advice/attention.

Storage
Store locked up.

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

Other hazards
None known.

Supplemental information
May be harmful if absorbed through skin. Individuals sensitive to this material or other materials in its chemical class may develop allergic reactions.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylprednisolone Acetate</td>
<td></td>
<td>53-36-1</td>
<td>2-4</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td></td>
<td>7647-14-5</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Myristyl-gamma-picolinium chloride</td>
<td></td>
<td>2748-88-1</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td></td>
<td>25322-68-3</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
<td>*</td>
</tr>
</tbody>
</table>

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments
* Non-hazardous Ingredients

4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist. For breathing difficulties, oxygen may be necessary.

Skin contact
May be absorbed through the skin and cause systemic effects. Wash off immediately with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Get medical advice/attention if you feel unwell.

Eye contact
Remove contact lenses, if present and easy to do. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion
Rinse mouth. Get medical advice/attention if you feel unwell. If ingestion of a large amount does occur, call a poison control centre immediately. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Most important symptoms/effects, acute and delayed
Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort. Adverse clinical reactions include the development of hypersensitivity and/or irritation leading to rashes, itching, and burning. Clinical use has resulted in hormonal alterations. Clinical use has resulted in changes in electrolytes and/or blood chemistry changes. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information
IF exposed or concerned: Get medical advice/attention. 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.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. 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
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
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.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.
6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Ensure adequate ventilation. Ventilate the contaminated area. Do not breath mist or vapour. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up**

Ensure adequate ventilation. Avoid release to the environment. Prevent entry into waterways, sewer, basements or confined areas. Remove sources of ignition.

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.

Environmental precautions

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**

Use this product with adequate ventilation. Wear appropriate personal protective equipment. Avoid accidental injection. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling. When using, do not eat, drink or smoke. Avoid discharge into drains, water courses or onto the ground.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in a well-ventilated place. @ 15 - 25˚C (59 - 77˚F). Protect from sunlight. Do not allow material to freeze. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls/personal protection

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Zoetis Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylprednisolone Acetate (CAS 53-36-1)</td>
<td>TWA</td>
<td>4 µg/m³</td>
</tr>
</tbody>
</table>

**Biological limit values**

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

**Exposure guidelines**

OEL Additional Information: Skin - May be absorbed through the skin and cause systemic effects.

**Control banding approach**

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, such as personal protective equipment**

**Eye/face protection**

If contact is likely, safety glasses with side shields are recommended.

**Skin protection**

**Hand protection**

Wear appropriate chemical resistant gloves. Impervious, disposable gloves (double suggested) are recommended if skin contact with drug product is possible and for bulk processing operations.

**Other**

Wear suitable protective clothing. Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.

**Respiratory protection**

No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment. Whenever air contamination (mist, vapor or odor) is generated, respiratory protection is recommended as a precaution to minimize exposure. If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

**Thermal hazards**

Not applicable.

**General hygiene considerations**

Observe any medical surveillance requirements. 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**

Solution.
Physical state: Liquid.
Form: Liquid.
Colour: Colourless.
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 information:
  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: Hazardous polymerisation does not occur.
Conditions to avoid: Contact with incompatible materials. Heat, flames and sparks. Protect from freezing.
Incompatible materials: Strong oxidising agents.
Hazardous decomposition products: Irritating and/or toxic fumes and gases may be emitted upon the product’s decomposition.

11. Toxicological information

Information on likely routes of exposure:
  Inhalation: Health injuries are not known or expected under normal use.
  Skin contact: May be absorbed through the skin and cause systemic effects.
    Polyethylene glycol: Species: Rabbit, Severity: Mild
    Sodium chloride: Species: Rabbit, Severity: Mild
Skin contact
Methylprednisolone Acetate  Species: Rabbit  Severity: No effect

Eye contact
Polyethylene glycol  Direct contact with eyes may cause temporary irritation.  Species: Rabbit  Severity: Mild
Sodium chloride  Species: Rabbit  Severity: Moderate
Methylprednisolone Acetate  Species: Rabbit  Severity: No effect

Ingestion
Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhoea. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics
Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort. Adverse clinical reactions include the development of hypersensitivity and/or irritation leading to rashes, itching, and burning. Clinical use has resulted in changes in electrolytes and/or blood chemistry changes. Clinical use has resulted in hormonal alterations. Prolonged exposure may cause chronic effects.

Information on toxicological effects
Acute toxicity
Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

<table>
<thead>
<tr>
<th>Components</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat &gt; 10000 mg/kg</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse &gt; 1409 mg/kg [Sub-tenon injection (eye)]</td>
</tr>
<tr>
<td><strong>Subcutaneous</strong></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat 265 mg/kg</td>
</tr>
<tr>
<td><strong>Chronic</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>NOAEL</td>
<td>Rat 0.004 mg/kg/day, 52 weeks [Subcutaneous, Target organ(s): Blood forming organs, Adrenal gland] Data for methylprednisolone</td>
</tr>
<tr>
<td><strong>Subacute</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
</tr>
<tr>
<td>LOAEL</td>
<td>Dog 0.167 mg/kg/day, 42 days [Target organ(s): Adrenal gland] Data for methylprednisolone</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>LOAEL</td>
<td>Rat 0.5 mg/kg/day, 6 weeks [Subcutaneous, Target organ(s): None identified] Data for methylprednisolone</td>
</tr>
<tr>
<td><strong>Subchronic</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>NOAEL</td>
<td>Rat 0.0004 mg/kg/day, 14 weeks [Subcutaneous, Target organ(s): Blood forming organs, Adrenal gland] Data for methylprednisolone</td>
</tr>
</tbody>
</table>

Myristyl-gamma-picolinium chloride (CAS 2748-88-1)

**Acute**

**Intraperitoneal**
LD50  Rat 7500 ug/kg
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>Rat</td>
<td>250 mg/kg</td>
</tr>
<tr>
<td>Other LD50</td>
<td>Rat</td>
<td>30 mg/kg</td>
</tr>
<tr>
<td>Subcutaneous LD50</td>
<td>Rat</td>
<td>200 mg/kg</td>
</tr>
<tr>
<td>Chronic Oral</td>
<td>Rat</td>
<td>2400 mg/kg, 60 days</td>
</tr>
</tbody>
</table>

Sodium chloride (CAS 7647-14-5)

- **Acute**
  - Oral LD50 Mouse: 4000 mg/kg
  - Oral Rat: 3000 mg/kg

**Skin corrosion/irritation**

- Prolonged skin contact may cause temporary irritation.

**Corrosivity**

- Methylprednisolone Acetate Species: Rabbit Severity: No effect

**Serious eye damage/eye irritation**

- Direct contact with eyes may cause temporary irritation.

**Eye contact**

- Polyethylene glycol Species: Rabbit Severity: Mild
- Sodium chloride Species: Rabbit Severity: Moderate
- Methylprednisolone Acetate Species: Rabbit Severity: No effect

**Respiratory or skin sensitisation**

- **Respiratory sensitisation** Not a respiratory sensitizer.
- **Skin sensitisation** This product is not expected to cause skin sensitisation. Individuals sensitive to this material or other materials in its chemical class may develop allergic reactions.

**Skin sensitisation**

- Methylprednisolone Acetate GPMT, (data for methylprednisolone) Result: No effect Species: Guinea pig

**Germ cell mutagenicity**

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

**Mutagenicity**

- Methylprednisolone Acetate Direct DNA Interaction Result: negative Species: Not applicable
- In Vitro Cytogenetics Result: negative Species: Not applicable

**Carcinogenicity**

- This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Reproductive toxicity**

- May damage the unborn child.
Developmental effects
Methylprednisolone Acetate

- 0.1 mg/kg/day Embryo / Fetal Development, LOAEL
  - Result: Teratogenic (Methylprednisolone)
  - Species: Rabbit
  - Organ: Intramuscular

- 1 mg/kg/day Embryo / Fetal Development, LOAEL
  - Result: Fetotoxicity, Teratogenic (Methylprednisolone)
  - Species: Rat
  - Organ: Subcutaneous

- 330 mg/kg/day Embryo / Fetal Development, LOAEL
  - Result: Teratogenic (Methylprednisolone)
  - Species: Mouse
  - Organ: Intramuscular

Reproductivity
Methylprednisolone Acetate

- 0.004 mg/kg/day Reproductive & Fertility, NOAEL
  - Result: Paternal toxicity (Methylprednisolone)
  - Species: Rat
  - Organ: Subcutaneous

- 0.02 mg/kg/day Reproductive & Fertility, LOAEL
  - Result: Fetotoxicity (Methylprednisolone)
  - Species: Rat
  - Organ: Subcutaneous

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
May cause damage to organs (Adrenal gland, blood forming organs) through prolonged or repeated exposure.

Aspiration hazard
Not an aspiration hazard.

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

Further information
Caution - Pharmaceutical agent. May be harmful if absorbed through skin.

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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene glycol (CAS 25322-68-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Atlantic salmon (Salmo salar)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 1000 mg/l, 96 hours</td>
</tr>
<tr>
<td>Sodium chloride (CAS 7647-14-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>340.7 - 469.2 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6020 - 7070 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

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

Bioaccumulative potential
No data available.

Partition coefficient n-octanol / water (log Kow)
Myristyl-gamma-picolinium chloride
1.3, pH 7.4

Mobility in soil
No data available.

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 instructions: Avoid release to the environment. Do not discharge into drains, watercourses or onto the ground. 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.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: None known.

Waste from residues / unused products: 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
TDG: 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
Canadian regulations: This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act: Not regulated.
Greenhouse Gases: Not listed.
Precursor Control Regulations: 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>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)*</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

*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**: 17-May-2017

**Version No.**: 01

**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: Synonyms
Composition / Information on Ingredients: Ingredients
GHS: Qualifiers