SAFETY DATA SHEET

1. Identification

Product identifier  Deccox® 6%

Other means of identification

Synonyms  DECCOX * Decoquinate 6% with corn meal carrier * Decoquinate medicated 6% premix

Recommended use of the chemical and restrictions on use

Recommended use  Veterinary product used for coccidiosis; Feed additive

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. Keep away from heat/sparks/open flames/hot surfaces. · No smoking. Ground/bond container and receiving equipment. Prevent dust accumulation to minimize explosion hazard.

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  May form combustible dust concentrations in air.

Supplemental information  None.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients  CAS number and other unique identifiers  Concentration of ingredients (%)

Decoquinate  18507-89-6  6

Silicon dioxide, colloidal NF  7631-86-9  <3

Soybean oil  8001-22-7  <3

Material name: Deccox® 6%
4. First-aid measures

Description of necessary first aid measures

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Do not rub eyes. 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**
Call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth. 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.

**Symptoms caused by exposure**
Dusts may irritate the respiratory tract, skin and eyes.

**Medical attention and special treatment**
Treat symptomatically.

5. Fire-fighting measures

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

**Suitable extinguishing media**
During fire, gases hazardous to health may be formed. Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

**Unsuitable extinguishing media**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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

**Special protective equipment and precautions for fire fighters**
None.

**General fire hazards**
May form combustible dust concentrations in air. Fine particles (such as mists) may fuel fires/explosions.

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

**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 the generation of dusts during clean-up. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains.

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

Small Spills: Wipe up with a damp cloth and place in container for disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling

Use with adequate ventilation. Minimise dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. When handling, use appropriate personal protective equipment (see Section 8).

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls and personal protection

Control parameters

Follow standard monitoring procedures.

Occupational exposure limits

<table>
<thead>
<tr>
<th>Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A) Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon dioxide, colloidal NF (CAS 7631-86-9)</td>
<td>TWA</td>
<td>2 mg/m3</td>
<td>Respirable dust.</td>
</tr>
<tr>
<td>Soybean oil (CAS 8001-22-7)</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Inhalable mist.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment) Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon dioxide, colloidal NF (CAS 7631-86-9)</td>
<td>TWA</td>
<td>2 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Soybean oil (CAS 8001-22-7)</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Inspirable dust.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UK. EH40 Workplace Exposure Limits (WELs) Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon dioxide, colloidal NF (CAS 7631-86-9)</td>
<td>TWA</td>
<td>6 mg/m3</td>
<td>Inhalable dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.4 mg/m3</td>
<td>Respirable dust.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG) Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon dioxide, colloidal NF (CAS 7631-86-9)</td>
<td>TWA</td>
<td>4 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

Biological limit values

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

Control banding approach

Decoquinate - Zoetis OEB 1 (control exposure to the range of 1000ug/m3 to 3000ug/m3)
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. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL (occupational exposure limit), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

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

Eye/face protection
- Wear safety glasses or goggles if eye contact is possible.

Skin protection
- Hand protection: Wear impervious gloves if skin contact is possible.
- Other: Wear suitable protective clothing. Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.

Respiratory protection
- Respiratory protection should be provided in instances where exposure to dust, mists, aerosols or vapors are likely. If airborne exposures are within or exceed the Occupational Exposure Band (OEB) range, wear an appropriate respirator with a protection factor sufficient to control exposures to the bottom of the OEB range. 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
- Wear appropriate thermal protective clothing, when necessary.

Hygiene measures
- When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
- Physical state: Solid.
- Form: Powder.
- Colour: Light cream
- Odour: Slight odor
- 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 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: Not available.
- Vapour density: Not available.
- Relative density: Not available.
- Solubility(ies)
  - Solubility (water): Insoluble
- Partition coefficient (n-octanol/water): Not available.
- Auto-ignition temperature: Not available.
- Decomposition temperature: Not available.
Viscosity

Other physical and chemical parameters

Dust explosion properties

- **Pmax**: 5.9 bar
- **dP/dT**: 91 bar/s
- **Kst**: 25 bar.m/s
- **St class**: 1 Weak explosion.
- **Min. Ignition Temperature (Dust)**: 400 °C (752 °F)
- **Minimum Ignition Energy (MIE) - dust cloud**: 30 - 100 mJ
- **Minimum Ignition Temperature (MIT) - dust layer**: 300 °C (572 °F) (LIT - layer ignition temp)

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

Incompatible materials

Strong oxidising agents.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

11. Toxicological information

Information on possible routes of exposure

**Inhalation**

Dust may irritate respiratory system. Prolonged inhalation may be harmful.

**Skin contact**

Dust or powder may irritate the skin. Species: Rabbit Severity: Non-irritating

**Eye contact**

Dust may irritate the eyes. Species: Rabbit Severity: Non-irritating

**Ingestion**

Expected to be a low ingestion hazard.

Symptoms related to exposure

Dusts may irritate the respiratory tract, skin and eyes.

Acute toxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deccox® 6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td></td>
<td>&gt; 20 mg/l (Calculated ATE)</td>
</tr>
<tr>
<td><strong>Components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Decoquinate</strong></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>4 mg/l (6 hours)</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

Material name: Deccox® 6%
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chronic</strong></td>
<td>Rat</td>
<td>40 mg/kg/day (Not carcinogenic)</td>
</tr>
<tr>
<td><strong>Subchronic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Dog</td>
<td>15 mg/kg/day (Target organs: none identified; Subdued behavior observed)</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
<td>Prolonged skin contact may cause temporary irritation.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Species: Rabbit</td>
<td>Severity: Non-irritating</td>
</tr>
<tr>
<td>Decoquinate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td></td>
<td>Direct contact with eyes may cause temporary irritation.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Species: Rabbit</td>
<td>Severity: Non-irritating</td>
</tr>
<tr>
<td>Decoquinate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitisation</strong></td>
<td></td>
<td>Not a respiratory sensitizer.</td>
</tr>
<tr>
<td>Respiratory sensitisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td>Species: Guinea Pig</td>
<td>Severity: negative</td>
</tr>
<tr>
<td>Decoquinate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td></td>
<td>No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decoquinate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td></td>
<td>Not classifiable as to carcinogenicity to humans.</td>
</tr>
<tr>
<td>IARC Monographs. Overall Evaluation of Carcinogenicity</td>
<td></td>
<td>Silicon dioxide, colloidal NF (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td></td>
<td>This product is not expected to cause reproductive or developmental effects.</td>
</tr>
<tr>
<td>Developmental effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decoquinate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Material name: Deccox® 6%
Specific target organ toxicity -
* single exposure *
Not classified.

Specific target organ toxicity -
* repeated exposure *
Not classified.

Aspiration hazard
Not an aspiration hazard.

Other information
Inhalation of dusts may cause respiratory irritation. Prolonged inhalation may be harmful.

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>Decoquinate (CAS 18507-89-6)</td>
<td>Daphnia Magna (Water Flea)</td>
<td>≥ 100 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Oncorhynchus mykiss (Rainbow Trout)</td>
<td>≥ 100 mg/l, 96 hours</td>
</tr>
<tr>
<td></td>
<td>Selenastrum capricornutum (Green Alga)</td>
<td>≥ 100 mg/l, 72 hours</td>
</tr>
</tbody>
</table>

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

Bioaccumulative potential

Partition coefficient
n-octanol / water (log Kow)
Decoquinate 5.2 - 5.5, Log P (measured)

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 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. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. Dispose of contents/container in accordance with local/regional/national/international regulations.

Residual waste
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

ADG
Not regulated as dangerous goods.

RID
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 applicable.

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).

APVMA No. 66670

Poison Schedule (Product) – Schedule 5

High Volume Industrial Chemicals (HVIC)

Silicon dioxide, colloidal NF (CAS 7631-86-9) 10000 - 99999 TONNES See the regulation for additional information.

Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</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 11-October-2016

Revision date 14-March-2017

Key abbreviations or acronyms used

ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).
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.

**Disclaimer**

**Revision information**

- Product and Company Identification: Synonyms
- Composition / Information on Ingredients: Ingredients
- Composition/information on ingredients: Composition comments
- First-aid measures: Personal protection for first-aid responders
- Physical & Chemical Properties: Multiple Properties
- Toxicological information: Other information
- Toxicological information: Inhalation
- Ecological Information: Ecotox Property Data
- Ecological information: Mobility in soil
- Disposal considerations: Disposal methods
- Disposal considerations: Contaminated packaging
- Regulatory information: National regulations
- GHS: Classification