SAFETY DATA SHEET



1. Identification

Product identifier Fostera Gold PCV

Other means of identification None.

Recommended use Veterinary vaccine
Recommended restrictions Not for human use
Manufacturer/Importer/Supplier/Distributor information

Company Name (US) Zoetis Inc.

10 Sylvan Way

Parsippany, New Jersey 07054 (USA)

Rocky Mountain Poison

and Drug Center

1-866-531-8896

Product Support/Technical

Services

1-800-366-5288

Emergency telephone

CHEMTREC (24 hours): 1-800-424-9300

numbers

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

Company Name (EU) Zoetis Belgium S.A.

Mercuriusstraat 20 1930 Zaventem

Belgium

Emergency telephone

number

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

Contact E-Mail VMIPSrecords@zoetis.com

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

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.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information This product is an oil-adjuvanted suspension. Oil-adjuvant containing products may cause severe

vasospasm following accidental injection.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--------------------------|--------------------------|-----------------|-------|
| Potassium phosphate | | 7778-77-0 | <5 |
| Merthiolate (as mercury) | | 54-64-8 | <0.01 |
| Chimeric PCV1-2a | | Not established | |

Material name: Fostera Gold PCV

Chemical name Common name and synonyms **CAS** number % Chimeric PCV1-2b Not established In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been Composition comments withheld as a trade secret. 4. First-aid measures Move to fresh air. Call a physician if symptoms develop or persist. For breathing difficulties, oxygen Inhalation may be necessary. In the case of skin contact, immediately wash the skin with plenty of soap and water. In the event Skin contact of accidental self injection or needle stick injury, wash the injury thoroughly with clean running water. Get medical attention immediately. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove Eye contact contact lenses, if present and easy to do. Rinse mouth. Call a physician or poison control center immediately. Only induce vomiting at the Ingestion instruction of medical personnel. Never give anything by mouth to an unconscious person. Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, Most important symptoms/effects, acute and redness, or discomfort. In the event of accidental injection, an allergic reaction may occur. Signs and symptoms might include skin rash, itching, redness or swelling. Respiratory reactions may be delayed characterized by rhinitis, sneezing, scratchy throat, oral mucosal edema, laryngeal mucosal edema, coughing, shortness of breath, wheezing, and chest pain. Asthma like reactions occur with acute exposures in sensitized patients. This product is an oil-adjuvanted suspension. Oil-adjuvant containing products may cause severe vasospasm following accidental injection. Treat symptomatically. Symptoms may be delayed. Where parenteral oil-adjuvanted vaccine Indication of immediate exposure has occurred, the patient should be promptly evaluated for the development of medical attention and special treatment needed vasospasm and/or compartment syndrome. 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. 5. Fire-fighting measures Foam. Dry chemicals. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Suitable extinguishing media Unsuitable extinguishing media Specific hazards arising from During fire, gases hazardous to health may be formed. the chemical Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Special protective equipment and precautions for firefighters Fire fighting Cool containers exposed to heat with water spray and remove container, if no risk is involved. equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials. Specific methods General fire hazards No unusual fire or explosion hazards noted. Material will burn in a fire.

6. Accidental release measures

Personal precautions, Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. protective equipment and emergency procedures Methods and materials for Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. containment and cleaning up Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapor. Avoid accidental injection. 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.

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

Material name: Fostera Gold PCV SDS US Conditions for safe storage, including any incompatibilities

Store out of direct sunlight in dark, dry conditions. @ 2 - 8°C (36 - 46°F). Do not freeze. Protect from light. 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/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

| US. | OSHA | Table | 7-2 | (29 | CFR | 1910.1 | (0001 |
|-----|-------------|--------|-----|-----|--------------|--------|-------|
| oo. | | I abic | 4-4 | 123 | VI II | 1310. | |

| Components | Туре | Value | |
|---|---------------|------------|--|
| Merthiolate (as mercury) (CAS 54-64-8) | Ceiling | 0.04 mg/m3 | |
| , | TWA | 0.01 mg/m3 | |
| US. ACGIH Threshold Limit Value | s | | |
| Components | Туре | Value | |
| Merthiolate (as mercury) (CAS 54-64-8) | STEL | 0.03 mg/m3 | |
| , | TWA | 0.01 mg/m3 | |
| US. NIOSH: Pocket Guide to Chen | nical Hazards | | |
| Components | Туре | Value | |
| Merthiolate (as mercury) (CAS 54-64-8) | STEL | 0.03 mg/m3 | |
| | TWA | 0.01 mg/m3 | |

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

Merthiolate (as mercury) (CAS 54-64-8)

Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

Merthiolate (as mercury) (CAS 54-64-8)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Merthiolate (as mercury) (CAS 54-64-8)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Merthiolate (as mercury) (CAS 54-64-8)

Can be absorbed through the skin.

Control banding approach Not available.

Appropriate engineering

controls

Ensure adequate ventilation, especially in confined areas. 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.

Other Wear suitable protective clothing. Use protective clothing (uniforms, lab coats, disposable

coveralls, etc.) in both production and laboratory areas.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. No personal respiratory

protective equipment normally required.

Thermal hazards Not applicable.

General hygiene considerations

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 stateLiquid.FormLiquid.

Color Pale to milky white.

Odor Not available.

Odor threshold Not available.

Material name: Fostera Gold PCV 3407 Version #: 01 Issue date: 09-18-2017

Not available. pН Not available. Melting point/freezing point Not available. Initial boiling point and boiling

range

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.

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Vapor pressure Not available.

Not available. Vapor density Relative density Not available.

Solubility(ies)

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. Viscosity Not available.

Other information

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. Chemical stability

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Heat, flames and sparks. Sunlight. Exposure to light. Protect

from freezing.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

3407 Version #: 01 Issue date: 09-18-2017

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Skin contact Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Eve contact

Merthiolate (as mercury) Species: Rabbit

Severity: Mild

May be harmful if swallowed. However, ingestion is not likely to be a primary route of occupational Ingestion

exposure.

Material name: Fostera Gold PCV SDS US 4/7 Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness, and discomfort. In the event of accidental injection, an allergic reaction may occur. Signs and symptoms might include skin rash, itching, redness or swelling. Respiratory reactions may be characterized by rhinitis, sneezing, scratchy throat, oral mucosal edema, laryngeal mucosal edema, coughing, shortness of breath, wheezing, and chest pain. Asthma like reactions occur with acute exposures in sensitized patients. This product is an oil-adjuvanted suspension. Oil-adjuvant containing products may cause severe vasospasm following accidental injection.

Information on toxicological effects

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

Test Results Components Species

Merthiolate (as mercury) (CAS 54-64-8)

Acute Oral

LD50 Rat 75 mg/kg

Subcutaneous

LD50 Rat 98 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Eve Contact

Merthiolate (as mercury) Species: Rabbit Severity: Mild

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

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

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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.

Not an aspiration hazard. **Aspiration hazard**

The antigens included in this product are non-infectious. All have been prepared from killed or **Further information**

inactivated preparations of microorganisms.

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

Bioaccumulative potential

No data is available on the degradability of this product. No data available. Not expected to bioaccumulate.

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.

Material name: Fostera Gold PCV

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13. Disposal considerations

Disposal instructionsAvoid release to the environment. Do not allow this material to drain into sewers/water supplies.

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. This product contains trace quantities of mercury and may qualify as a RCRA Hazardous Waste. Status should be confirmed

Local disposal regulations

Dispose in accordance with all applicable regulations.

using the EPA Toxicity Characteristic Leaching Procedure (TCLP).

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

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

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Merthiolate (as mercury) (CAS 54-64-8)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Material name: Fostera Gold PCV 3407 Version #: 01 Issue date: 09-18-2017 Safe Drinking Water Act

(SDWA)

Not regulated.

US state regulations WARNING: This product contains a chemical known to the State of California to cause birth

defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Merthiolate (as mercury) (CAS 54-64-8) Listed: July 1, 1990

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 |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | 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).

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

09-18-2017 Issue date

Version #

United States & Puerto Rico

Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while Disclaimer

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

No

available.

Material name: Fostera Gold PCV