SAFETY DATA SHEET

1. Identification

Product identifier: Hetacin K® Intramammary Infusion
Other means of identification:
   Synonyms: Hetacillin potassium
   Recommended use: Broad-spectrum agent that provides bactericidal activity against a wide array of common gram-positive and gram negative bacteria.
   Recommended restrictions: Not for human use.

Manufacturer/Importer/Supplier/Distributor information:
   Manufacturer: Boehringer Ingelheim Vetmedica, Inc.
   Address: 2621 North Belt Hwy
             St. Joseph, MO 64506-2002
   Transportation emergency: For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night
                            Within USA and Canada: 1-800-424-9300
                            Outside USA and Canada: +1 703-527-3887 (collect calls accepted)
   Medical Emergency (24HR): (866)638-2226
   Non-Emergency calls: (800) 821-7467

2. Hazard(s) identification

Physical hazards: Not classified.
Health 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. Store below 86°F (30°C).
       Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC):
   Hetacillin potassium is a beta lactam antibiotic and can cause sensitization. Exposure in sensitive individuals may cause anaphylactic allergic reactions. Rags, steel wool, or waste contaminated with this product may spontaneously catch fire if improperly discarded.

Supplemental information: Not applicable.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peanut oil</td>
<td>8002-03-7</td>
<td>&gt; 90</td>
</tr>
<tr>
<td>Hetacillin potassium</td>
<td>5231-32-4</td>
<td>&lt; 10</td>
</tr>
</tbody>
</table>
4. 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 Rinse with water. Get medical attention if irritation develops and persists.
Ingestion Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed Not for human use. For use in cattle only.
General information Persons developing anaphylactic (life-threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.

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 Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. 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 Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from foodstuffs. Protect from direct sunlight. Store below 86°F (30°C). Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection
Occupational exposure limits
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peanut oil (CAS 8002-03-7)</td>
<td>PEL</td>
<td>5 mg/m3</td>
<td>Respirable fraction. Mist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peanut oil (CAS 8002-03-7)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Respirable. Mist.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>
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.

Individual protection measures, such as personal protective equipment

Eye/face protection
Not generally required when handling containers. If containers are compromised or exposure to the mixture is likely: Wear safety glasses with side shields (or goggles).

Skin protection
Hand protection
Not generally required when handling containers. If containers are compromised or exposure to the mixture is likely: Wear suitable gloves.

Other
Not generally required when handling containers. If containers are compromised or exposure to the mixture is likely: Wear lab coat, apron or appropriate clothing to prevent skin contact.

Respiratory protection
Not generally required when handling vials or containers. 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. Respirator type: NIOSH approved organic vapor respirator.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

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
White to yellowish liquid emulsion.

Physical state
Liquid.

Form
Emulsion.

Color
White to yellow.

Odor
Not available.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
23 °F (-5 °C)

Initial boiling point and boiling range
Not available.

Flash point
541.4 °F (283.0 °C)

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.

Vapor pressure
Not available.

Vapor 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
Not available.
10. Stability and reactivity
Reactivity Chemical stability Possibility of hazardous reactions Conditions to avoid Incompatible materials Hazardous decomposition products
The product is stable and non-reactive under normal conditions of use, storage and transport. Material is stable under normal conditions. No dangerous reaction known under conditions of normal use. Contact with incompatible materials. Strong oxidizing agents. No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
Inhalation Skin contact Eye contact Ingestion Symptoms related to the physical, chemical and toxicological characteristics
No adverse effects due to inhalation are expected. No adverse effects due to skin contact are expected. May cause an allergic skin reaction. Direct contact with eyes may cause temporary irritation. Expected to be a low ingestion hazard. In case of accidental injection, wash the site thoroughly. Contact a physician immediately.

Information on toxicological effects
Acute toxicity Skin corrosion/irritation Serious eye damage/eye irritation Respiratory or skin sensitization Respiratory sensitization Skin sensitization Germ cell mutagenicity Carcinogenicity OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
This product is considered nontoxic. Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Not available. 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 mutagenic or genotoxic. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Not listed. This product is not expected to cause reproductive or developmental effects. Not classified. Not classified. Due to partial or complete lack of data the classification is not possible. Possible hypersensitization (development of abnormal sensitivity).

12. Ecological information
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Other adverse effects
No ecotoxicity data noted for the ingredient(s). No data is available on the degradability of this product. No data available. This product has not been tested. 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 Local disposal regulations Hazardous waste code
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations. The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Hetacin K® for Intramammary Infusion
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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
Empty containers should be taken to an approved waste handling site for recycling or disposal. 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 Annex II of MARPOL 73/78 and the IBC Code
Not available.

15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. Massachusetts RTK - Substance List
Peanut oil (CAS 8002-03-7)

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Peanut oil (CAS 8002-03-7)

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
Not Listed.
Hetacin K® for Intramammary Infusion

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

**Issue date** 28-May-2015

**Revision date** -

**Version #** 01

**HMIS® ratings**
- Health: 1
- Flammability: 1
- Physical hazard: 0

**NFPA ratings**

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