

1. Identification

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| Product identifier | Pyramid® 3 + Presponse® SQ |
| Other means of identification | None. |
| Recommended use | Solution for animal injection. |
| Recommended restrictions | None known. |
| 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

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| 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. |
| Disposal | Dispose of waste and residues in accordance with local authority requirements. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | For animal injection only. Not for human use. Accidental human injection can cause serious local reactions or anaphylactic reaction and systemic effects. |

3. Composition/information on ingredients

Mixtures

| Chemical name | CAS number | % |
|---|------------|-------------|
| Bovine Rhinotracheitis Virus (modified live) | - | Proprietary |
| Bovine Virus Diarrhea – Type 1 and 2 (modified live) | - | Proprietary |
| Mannheimia haemolytica, toxoid bacterin (deactivated) | - | Proprietary |
| Thimerosal | 54-64-8 | < 0.01 |

Composition comments The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

Thimerosal is used to inactivate virus and/or bacterin-toxoid and subsequently removed from solution. Concentration represents maximum remaining amount by percent weight which is below USDA allowable limits.

4. First-aid measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If ingestion occurs: Call a physician or poison control center immediately.

Most important symptoms/effects, acute and delayed May cause eye, skin and respiratory tract irritation. Accidental human injection can cause serious local reactions or anaphylactic reaction and systemic effects.

Indication of immediate medical attention and special treatment needed Not for human use. For use in animals only. Treat symptomatically. Persons developing anaphylactic (life threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed. Combustion products may include: carbon monoxide, carbon dioxide, mercury compounds, sodium oxides, sulfur oxides..

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. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Absorb spillage with non-combustible, absorbent material. Clean surface thoroughly to remove residual contamination. Decontaminate all wastes that contain or have come in contact with the infectious organism by autoclave, chemical disinfection, gamma irradiation, or incineration before disposing. For waste disposal, see section 13 of the SDS.

Environmental precautions Should not be released into the environment. Do not discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Use care in handling/storage. Avoid contact with eyes, skin, and clothing. Avoid accidental injection. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities Store in the dark at 2°C to 7°C (35°F to 45°F). Avoid freezing. Shake Well. Keep out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-2 (29 CFR 1910.1000)

| Components | Type | Value |
|--------------------------|---------|------------------------|
| Thimerosal (CAS 54-64-8) | Ceiling | 0.04 mg/m ³ |
| | TWA | 0.01 mg/m ³ |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|--------------------------|------|------------------------|
| Thimerosal (CAS 54-64-8) | STEL | 0.03 mg/m ³ |
| | TWA | 0.01 mg/m ³ |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|--------------------------|------|------------------------|
| Thimerosal (CAS 54-64-8) | STEL | 0.03 mg/m ³ |
| | TWA | 0.01 mg/m ³ |

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

Exposure guidelines**US - California OELs: Skin designation**

Thimerosal (CAS 54-64-8) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

Thimerosal (CAS 54-64-8) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Thimerosal (CAS 54-64-8) Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Thimerosal (CAS 54-64-8) Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation 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 Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Impervious gloves should be used at all times when handling this product.

Other Wear lab coat or other protective garments.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

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**

Physical state Liquid.

Form Lyophilized modified live virus supplied as a cake with a solution of deactivated bacterin diluents.

Color Reddish white to yellow.

Odor Not available.

Odor 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.

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| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor 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. |
| Oxidizing properties | Not oxidizing. |

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 | Exposure to light. Protect from temperatures below: 35°F. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

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|---------------------|--|
| Inhalation | Mist/aerosols may cause respiratory tract irritation. |
| Skin contact | Prolonged skin contact may cause temporary irritation. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| Ingestion | Ingestion may cause irritation and malaise. However, ingestion is not likely to be a primary route of occupational exposure. |

Symptoms related to the physical, chemical and toxicological characteristics May cause eye, skin and respiratory tract irritation. Accidental human injection can cause serious local reactions or anaphylactic reaction and systemic effects.

Information on toxicological effects

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|--|--|
| Acute toxicity | Not expected to be acutely toxic. |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. |
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. |

Respiratory or skin sensitization

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|----------------------------------|---|
| Respiratory sensitization | Not a respiratory sensitizer. |
| Skin sensitization | This product is not expected to cause skin sensitization. |

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

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

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

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| Specific target organ toxicity - single exposure | Not classified. |
| Specific target organ toxicity - repeated exposure | Not classified. |
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | Possible hypersensitization (development of abnormal sensitivity). Contains thimerosal. Thimerosal is an organic mercury compound preservative found in vaccines. Long-term exposure to mercury compounds may cause damage to the nervous system. In vaccines, the chronic exposure potential is negligible. |

12. Ecological information

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|--------------------------------------|--|
| 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. |
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| Other adverse effects | Do not release into the environment. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. |

13. Disposal considerations

| | |
|--|--|
| Disposal instructions | Material must be decontaminated prior to disposal or be disposed of as a biohazard waste before being released from the laboratory. Dispose of in accordance with local, state, federal, national or international regulations for biohazardous materials. |
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | D009: Waste Mercury The waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Waste from residues / unused products | 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). Decontaminate all wastes that contain or have come in contact with the infectious organism by autoclave, chemical disinfection, gamma irradiation, or incineration before disposing. |
| Contaminated packaging | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Decontaminate before disposal: steam sterilization, incineration, chemical disinfection, or autoclaved when applicable. Dispose in accordance with all applicable regulations. |

14. Transport information

DOT

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|-------------------------------------|---|
| UN number | UN3373 |
| UN proper shipping name | Biological substance, Category B |
| Transport hazard class(es) | |
| Class | 6.2 |
| Subsidiary risk | - |
| Label(s) | 6.2 |
| Packing group | Not applicable. |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | A82 |
| Packaging exceptions | 134 |
| Packaging non bulk | 199 |
| Packaging bulk | None |

IATA

| | |
|-------------------------------------|---|
| UN number | UN3373 |
| UN proper shipping name | Biological substance, Category B |
| Transport hazard class(es) | |
| Class | 6.2 |
| Subsidiary risk | - |
| Packing group | Not applicable. |
| Environmental hazards | No. |
| ERG Code | 11L |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

IMDG

| | |
|---|---|
| UN number | UN3373 |
| UN proper shipping name | BIOLOGICAL SUBSTANCE, CATEGORY B |
| Transport hazard class(es) | |
| Class | 6.2 |
| Subsidiary risk | - |
| Packing group | Not applicable. |
| Environmental hazards | |
| Marine pollutant | No. |
| EmS | F-A, S-T |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not established. |

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.

One or more components are not listed on TSCA.
Therefore, it can only be used for TSCA exempt purposes such as R&D or veterinary use.
FEDERAL LAW RESTRICTS THIS DRUG TO USE BY OR ON ORDER OF LICENSED VETERINARIANS.

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 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Thimerosal (CAS 54-64-8)

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

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations

US. Massachusetts RTK - Substance List

Thimerosal (CAS 54-64-8)

US. New Jersey Worker and Community Right-to-Know Act

Thimerosal (CAS 54-64-8)

US. Pennsylvania Worker and Community Right-to-Know Law

Thimerosal (CAS 54-64-8)

US. Rhode Island RTK

Not regulated.

California Proposition 65**WARNING:** This product can expose you to Thimerosal, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.**California Proposition 65 - CRT: Listed date/Developmental toxin**

Thimerosal (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 |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates this product complies 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, including date of preparation or last revision**Issue date** 15-February-2019**Revision date** -**Version #** 01**HMIS® ratings** Health: 1
Flammability: 1
Physical hazard: 0**NFPA ratings****Disclaimer**

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