



SAFETY DATA SHEET

1. Identification

Product identifier Titanium® 3

Other means of identification

Item Code AV4105

Synonym(s) Bovine Rhinotracheitis-Virus Diarrhea Vaccine (Modified Live Virus)

Recommended use Veterinary Vaccine

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Diamond Animal Health, Inc.
Des Moines, Iowa 50327 USA

Distributor:

Company Name Elanco Animal Health
2500 Innovation Way
Greenfield, IN 46140 USA

Phone: 1-877-Elanco1 (1-877-352-6261)

Emergency Telephone Numbers: Elanco Product Technical Support / Human or Animal Exposure Reporting
1-888-545-5973
Transportation Emergency Telephone: CHEMTREC: 1-800-424-9300

Email: lilly_msds@lilly.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 Not assigned.

Response Not assigned.

Storage Not assigned.

Disposal Not assigned.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information In the event of accidental injection, an allergic reaction may occur.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
IBR-BVD	Titanium® 3 (Modified Live Virus)	N/A	*
Sterile diluent			*

* All components are nonhazardous and/or below required disclosure limits.

Composition comments This product contains 2 components.
Solid: (Titanium 3)
Liquid: (Sterile diluent)

4. First-aid measures

General information NOT FOR HUMAN USE!

Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. IF exposed or concerned: Get medical advice/attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation develops and persists.
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion	If conscious, give the victim plenty of water to drink. Never give anything by mouth to a victim who is unconscious or is having convulsions. Consult a physician.
Most important symptoms/effects, acute and delayed	In the event of accidental injection, an allergic reaction may occur.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Water. Carbon dioxide (CO ₂). Dry chemical.
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	Fire or excessive heat may produce hazardous decomposition products.
Special protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid contact with skin, eyes and clothing. Wear suitable protective clothing, gloves and eye/face protection.
Methods and materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Clean contaminated surface thoroughly. Flush with plenty of water. Soak up with inert absorbent material. Transfer to a container for disposal. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid release to the environment.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Avoid breathing mists or aerosols of this product.
Conditions for safe storage, including any incompatibilities	Store at: 2 - 8 C. Do not allow material to freeze. Do not store in open or unlabelled containers. Use entire contents when first opened.

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	General ventilation normally adequate.
General hygiene considerations	Wash hands after handling.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Safety glasses with side-shields.
Skin protection	
Hand protection	Chemical resistant gloves.
Other	Chemical-resistant gloves and impermeable body covering to minimize skin contact.
Respiratory protection	In case of inadequate ventilation, use respiratory protection. (i.e. product breakage) Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Thermal hazards	Not available.

9. Physical and chemical properties

Appearance	Liquid in vial or syringe (Sterile diluent) Dessicated solid in vial (Titanium 3)
Physical state	Solid, Liquid.

Form	Dessicated solid with diluent.
Color	No data available.
Odor	No data available.
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No test data available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	No data available.
Flammability limit - upper (%)	No data available.
Explosive limit - lower (%)	No data available.
Explosive limit - upper (%)	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	
Solubility (water)	No data available.
Partition coefficient (n-octanol/water)	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Other information	
Density	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.
Percent volatile	No data available.

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 polymerization does not occur.
Conditions to avoid	Avoid high temperatures. Do not allow material to freeze.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions.

11. Toxicological information

Information on toxicological effects

Acute toxicity	Based on the nature of this substance and the known health effects of the components, this preparation is considered unlikely to produce health effects through relevant routes of occupational exposures. In the event of accidental injection, an allergic reaction may occur.
Skin corrosion/irritation	No data available.
Serious eye damage/eye irritation	No data available.
Respiratory or skin sensitization	
Respiratory sensitization	No data available.
Skin sensitization	No data available.

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	No ingredients present at 0.1% (one-tenth percent) or greater are listed by IARC, NTP, ACGIH, or OSHA.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	No data available.
Specific target organ toxicity - single exposure	No data available.
Specific target organ toxicity - repeated exposure	No data available.
Aspiration hazard	No aspiration toxicity classification
Further information	The active components of this vaccine are not considered to be pathogenic for healthy individuals even if inhaled, ingested or applied to the eyes or skin. In the event of accidental injection, an allergic reaction may occur.

12. Ecological information

Ecotoxicity	The environmental characteristics of this material have not been fully evaluated. Ecological injuries are not known or expected under normal use.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available for this product.
Mobility in soil	No data available.
Other adverse effects	Not available.

13. Disposal considerations

Disposal instructions	Containers and unused contents should be burned under controlled conditions. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations.
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 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.
CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed.
SARA 304 Emergency release notification	Not regulated.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.
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 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**

Not regulated.

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

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	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).

16. Other information, including date of preparation or last revision**Issue date** 02-26-2014**Version #** 01**List of abbreviations** IBR-BVD: Bovine Rhinotracheitis-Virus Diarrhea Vaccine (Modified Live Virus)

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For additional information contact:

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