SAFETY DATA SHEETS

This SDS packet was issued with item:

078393673

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078392830

Elanco

SAFETY DATA SHEET

1. Identification

Product identifier Titanium® 5

Other means of identification

Item Code AV4135

Synonyms Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial Virus Vaccine

(Modified Live Virus)

Recommended use Veterinary Vaccine

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

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:

Email:

Elanco Product Technical Support / Human or Animal Exposure Reporting 1-888-545-5973

Transportation Emergency Telephone: CHEMTREC: 1-800-424-9300

elanco sds@elanco.com

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

PreventionNot assigned.ResponseNot assigned.StorageNot assigned.DisposalNot 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

Material name: Titanium® 5

The manufacturer lists no ingredients as hazardous to health according to OSHA 29 CFR 1910.1200.

4. First-aid measures

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.

If conscious, give the victim plenty of water to drink. Never give anything by mouth to a victim who Ingestion

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.

NOT FOR HUMAN USE! **General information**

5. Fire-fighting measures

Suitable extinguishing media

Not available.

Unsuitable extinguishing

media

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.

Water. Carbon dioxide (CO2). Dry chemical.

Avoid release to the environment. **Environmental precautions**

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 °F (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

Occupational exposure limits

This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

Biological limit values

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

Appropriate engineering

controls

General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Safety glasses with side-shields. Eye/face protection

Skin protection

Hand protection Chemical resistant gloves.

Chemical-resistant gloves and impermeable body covering to minimize skin contact. Other Respiratory protection In case of inadequate ventilation, use respiratory protection. (i.e. product breakage)

Thermal hazards Not available.

General hygiene considerations

Wash hands after handling.

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9. Physical and chemical properties

Liquid in vial or syringe (Sterile diluent) **Appearance**

Dessicated solid in vial (Titanium 5)

Physical state Liquid.

Dessicated solid with diluent. **Form**

Color No data available. No data available. Odor **Odor threshold** No data available. No data available. рH No data available. Melting point/freezing point Initial boiling point and boiling No data available.

range

No data available.

Flash point **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.

No data available. Explosive limit - lower (%) Explosive limit - upper (%) No data available. No data available. Vapor pressure Vapor density No data available. No data available.

Relative density Solubility(ies)

Solubility (water) No data available. **Partition coefficient** No data available.

(n-octanol/water)

Auto-ignition temperature No data available. **Decomposition temperature** No data available. No data available. **Viscosity**

Other information

Density No data available. **Explosive properties** Not explosive.

Oxidizing properties The substance or mixture is not classified as oxidizing.

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 Hazardous polymerization does not occur.

reactions

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.

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Skin corrosion/irritation

Due to lack of data the classification is not possible.

Serious eye damage/eye

Due to lack of data the classification is not possible.

irritation

Respiratory or skin sensitization

Respiratory sensitization
Skin sensitization
Due to lack of data the classification is not possible.

Due to lack of data the classification is not possible.

Due to lack of data the classification is not possible.

Carcinogenicity No ingredients present at 0.1% (one-tenth percent) or greater are listed by IARC, NTP, ACGIH, or

OSHA.

Due to lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityDue to lack of data the classification is not possible. **Specific target organ toxicity -**Due to lack of data the classification is not possible.

single exposure

Specific target organ toxicity - repeated exposure

Due to lack of data the classification is not possible.

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.

12. Ecological information

EcotoxicityThe 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 potentialNo data available for this product.

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructionsDispose of contents/container in accordance with local/regional/national/international regulations.

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 available.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

Toxic Substances Control Act (TSCA)

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.

Material name: Titanium® 5

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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.

International Inventories

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryNo

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

 Issue date
 02-26-2014

 Revision date
 03-29-2019

Version # 05

List of abbreviations IBR-BVD-PI3-BRSV: Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza3-Respiratory Syncytial

Virus Vaccine (Modified Live Virus)

Disclaimer As of the date of issuance, we are providing available information relevant to the handling of this

material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature

which may accompany the finished product.

For additional information contact:

Elanco Animal Health 0011+1-877-352-6261 0011+1-800-428-4441

Material name: Titanium® 5 sps us

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^{*}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).