SAFETY DATA SHEETS

This SDS packet was issued with item:

078502116

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

078704626 078704634

Boehringer Ingelheim

SAFETY DATA SHEET

1. Identification

Product identifier Bovikalc®
Other means of identification None.

Recommended use For use as calcium supplement in freshening cows.

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

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2A

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Wear eye/face protection.

Response If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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 None.

3. Composition/information on ingredients

Mixtures

| Chemical name | CAS number | % |
|--|------------|-------------|
| Calcium chloride, dihydrate | 10035-04-8 | proprietary |
| Calcium sulfate | 7778-18-9 | proprietary |
| Calcium sulfate hemihydrate | 10034-76-1 | proprietary |
| Acetylated monoglycerides, coating agent | N/A | proprietary |

Bovikalc® SDS US

926707 Version #: 02 Revision date: 12-May-2018 Issue date: 06-May-2015

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

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

Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove Eye contact

contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation

develops and persists.

Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. Ingestion

Most important

symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes. Ingestion of a large quantity may cause nausea and systemic effects.

Not for human use. For use in animals only. Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. Persons developing anaphylactic (life threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

None known.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

General information

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

Specific methods General fire hazards Use water spray to cool unopened containers.

Powder. Water spray. Foam. Carbon dioxide (CO2).

During fire, gases hazardous to health may be formed.

Use standard firefighting procedures and consider the hazards of other involved materials.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

The product itself does not burn.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Environmental precautions

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

For waste disposal, see section 13 of the SDS.

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

7. Handling and storage

Precautions for safe handling

Avoid contact with skin, eyes and clothing. Do not taste or swallow. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store in a well-ventilated place. Protect from direct sunlight. Store away from incompatible materials (see Section 10 of the SDS). Store away from foodstuffs. Store at temperatures not exceeding 25°C/77°F.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value | Form |
|--|------|----------|----------------------|
| Calcium sulfate (CAS 7778-18-9) | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| Calcium sulfate hemihydrate (CAS 10034-76-1) | PEL | 5 mg/m3 | Respirable fraction. |
| , | | 15 mg/m3 | Total dust. |

Bovikalc® SDS US

| US. ACGIH Threshold Limit Value Components | ues Type | Value | Form |
|--|----------------|----------|---------------------|
| Calcium sulfate (CAS 7778-18-9) | TWA | 10 mg/m3 | Inhalable fraction. |
| US. NIOSH: Pocket Guide to Ch | emical Hazards | | |
| Components | Туре | Value | Form |
| Calcium sulfate (CAS 7778-18-9) | TWA | 5 mg/m3 | Respirable. |
| , | | 10 mg/m3 | Total |
| Calcium sulfate hemihydrate (CAS 10034-76-1) | TWA | 5 mg/m3 | Respirable. |
| , | | 10 mg/m3 | Total |

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

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. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Skin protection

Other Wear suitable protective clothing.

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

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

Solid. **Physical state**

Wax coated bolus. **Form**

Color White. Odorless. Odor **Odor threshold** Not available. Not available. Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Non combustible.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

Version #: 02

926707

Not available.

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

Vapor pressure Not available. Not available. Vapor density

Bovikalc® SDS US

Issue date: 06-May-2015

Not available. Relative density

Solubility(ies)

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

(n-octanol/water)

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

10. Stability and reactivity

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

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. High temperatures. Moisture.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Ingestion of a large quantity may cause nausea and systemic effects.

Information on toxicological effects

Not expected to be acutely toxic. **Acute toxicity**

Test Results Components **Species**

Calcium chloride, dihydrate (CAS 10035-04-8)

Acute Oral

LD50 Rat > 1000 mg/kg

Calcium sulfate (CAS 7778-18-9)

Acute Inhalation

LC50 Rat > 3.26 mg/l, 4 Hours

Oral

LD50 Rat > 1581 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

926707

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.

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

IARC Monographs. Overall Evaluation of Carcinogenicity

Revision date: 12-May-2018

Not listed.

Version #: 02

Bovikalc® SDS US

4/7

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.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

Chronic effects None known.

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.

Persistence and degradability

Bioaccumulative potential

No data is available on the degradability of this product.

No data available. Mobility in soil

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.

13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of **Disposal instructions**

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

Dispose in accordance with all applicable regulations. Local disposal regulations

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).

Empty containers should be taken to an approved waste handling site for recycling or disposal. 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.

Not established. Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

All components are listed on or exempt from the U.S. EPA TSCA Inventory List. **US federal regulations**

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.

Bovikalc® SDS US

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard

Serious eye damage or eye irritation

categories

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

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Calcium sulfate (CAS 7778-18-9)

Calcium sulfate hemihydrate (CAS 10034-76-1)

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

Calcium sulfate (CAS 7778-18-9)

Calcium sulfate hemihydrate (CAS 10034-76-1)

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

Calcium sulfate (CAS 7778-18-9)

Calcium sulfate hemihydrate (CAS 10034-76-1)

US. Rhode Island RTK

Not regulated.

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

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) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

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

Issue date 06-May-2015
Revision date 12-May-2018

Version # 02

Bovikalc® SDS US

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).

Further information

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling. HMIS® is a registered trade and service mark of the American Coatings Association (ACA).

HMIS® ratings

Health: 2 Flammability: 0 Physical hazard: 0

NFPA ratings



Disclaimer

The information provided herein is offered by Boehringer Ingelheim Vetmedica, Inc. ("BIVI") in good faith as accurate as of the date hereof, but without guarantee. This information includes information which has been generated by other parties and provided to BIVI, and which BIVI has not independently verified. The information provided herein relates only to the specific product designated, and may not be valid where such product is used in combination with any other materials or in any process. The information provided herein is offered solely for your consideration, investigation and verification, and Boehringer Ingelheim Vetmedica, Inc. ("BIVI") expressly disclaims all liability for reliance thereon. BIVI EXPRESSLY DISCLAIMS ALL WARRANTIES OF EVERY KIND AND NATURE (INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. In addition, since the conditions of use and suitability of the product for particular uses are beyond BIVI's control, ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER, AND BIVI EXPRESSLY DISCLAIMS ANY AND ALL LIABILITY AS TO ANY RESULTS OBTAINED OR ARISING FROM ANY USE OF THE PRODUCT. Use or transmission of the information contained herein in any other format than the format as presented is strictly prohibited. Nothing herein shall be construed as permission or recommendation for the use of the product in a manner that might infringe an existing patent. BIVI neither represents nor warrants that the format, content or product formulas contained in this document comply with the laws of any other country except the United States of America. Boehringer Ingelheim cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Bovikalc® SDS US