

MATERIAL SAFETY DATA SHEET
according to Regulation (EC) 1907/2006

Date: 20 September 2018

Product: BOVIKALC DRY mineral bolus for dairy cows.

1. Substance / preparation and company name

BOVIKALC DRY mineral bolus

Complementary mineral feed for dairy cows

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Business Unit Live Therapeutics & Nutraceuticals
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2. Composition/information on ingredients

| <u>Name</u> | <u>Formula</u> | <u>CAS No.</u> |
|---|--|-------------------|
| Calcium chloride (Dihydrate) | CaCl ₂ ·2H ₂ O | 10035-04-8 |
| Ammonium chloride | NH ₄ Cl | 12125-02-9 |
| Tap water | H ₂ O | N/A |
| Calcium sulphate (Hemihydrate) | CaSO ₄ ·½H ₂ O | 10034-76-1 |
| Alfa-tocopheryl acetate (vit. E) | C ₃₁ H ₅₂ O ₃ | 58-95-7 |
| Cholecalciferol (Vitamin D ₃) | C ₂₇ H ₄₄ O | 67-97-0 |
| Sodium selenite | Na ₂ SeO ₃ | 10102-18-8 |
| Mono- and diglycerides of fatty acids esterified with acetic acid (Coating agent) | | 97593-30-1 |
| <u>Xanthan gum (powdering agent)</u> | EU feed additive No. E 415 | <u>11138-66-2</u> |

3. Possible hazards

May cause eye and skin irritation upon direct contact.

4. First aid measures

| | |
|-----------------------|--|
| On skin contact: | Wash with soap and water. In case of persistent discomfort seek medical attention. |
| On contact with eyes: | Rinse thoroughly with plenty of water for at least 15 minutes keeping eyelid open. In case of persistent discomfort seek medical attention |
| On ingestion: | Toxicity following moderate ingestion is not expected. Ingestion should be avoided. |
| On inhalation: | Remove to fresh air. If discomfort persists, seek medical attention. |

5. Fire fighting measures

| | |
|--|--|
| The product is non-combustible. | |
| Hazardous combustion products: | At high temperatures the product will release ammonia. |
| Specific hazards during fire fighting: | Wear respiratory protection. |

6. Accidental release measures

| | |
|----------------------------|--|
| Personal precautions: | Review Sections 3, 4 and 8 before proceeding with clean up |
| Environmental precautions: | Not applicable |
| Methods for cleaning up: | Sweep and wash spill site after clear up. |

7. Handling and storage

| | |
|-------------------|--|
| General handling: | Avoid contact with eyes, skin and clothing. Avoid breathing dust. |
| Storage: | Keep dry and store below 30° C. The bolus will melt at temperatures > 35° C Store in its sealed container. The product is strongly hygroscopic. No other special measures necessary. |

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8. Exposure controls and personal protection

| | |
|--------------------------------------|--|
| Hand protection: | Wear protective gloves during handling. |
| Eye protection: | Wear safety glasses if risk of eye contact. |
| General safety and hygiene measures: | After handling, wash hands with soap and water |

9. Physical and chemical properties

| | |
|-----------------------|--|
| Physical form: | Wax coated cylinder |
| Weight: | 196 g per bolus |
| Colour: | White |
| Odour: | Odourless |
| Flash point: | not applicable. |
| Ignition temperature: | not applicable. |
| Solubility in water: | Partly soluble in water. Liberates heat upon dissolution in water. |

10. Stability and reactivity

| | |
|-----------------------------------|--------------------------|
| Conditions to avoid: | Protect against moisture |
| Hazardous reactions: | None |
| Hazardous decomposition products: | None |

11. Toxicological information

Acute toxicity:

| | |
|-------|--|
| Oral: | LD 50 (rat) > 4000 mg kg ⁻¹ (calcium chloride, Vitamin D ₃ , Sodium selenite) |
| Eyes: | Individual components may cause irritation of the eyes |
| Skin: | Individual components may cause irritation of the skin |

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Sub acute toxicity:

Oral: None expected

Eyes: None expected

Skin: None expected

Carcinogenicity: None expected

Mutagenicity: None expected

Teratogenicity: None expected

12. Ecological information

No data available to suggest any adverse effects

13. Disposal considerations

Disposal considerations

Product: No special precautions. Observe local and national regulations.

Packaging materials: Packaging materials are suitable for recycling or for disposal by incineration.

14. Transport information

Not classified as hazardous under any transport regulations

15. Regulatory information

EU: Complementary mineral feed

US: Mineral supplement for animals

16. Other information

Disclaimer: **Boehringer Ingelheim Animal Health Denmark A/S believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied.**

