

MATERIAL SAFETY DATA SHEET

| Section 1. Company Identification and Product Information | | | |
|---|------------------------------|--|-----------------------|
| Product Name or Identity: | Reveal® for Ruminant in Feed | | |
| Manufacturer's Name: | Neogen Corporation | Emergency Phone No.: | 517/372-9200 |
| | 620 Leshler Place | Fax No.: | 517/372-0108 |
| | Lansing, MI 48912 | e-mail: | foodsafety@neogen.com |
| Date Prepared or Revised: | March 2013 | Chemtrec: (800) 424-9300 | |
| | | Outside US and Canada: (703) 527-3887 | |

| Section 2. Composition / Information on Hazardous Ingredients | | | |
|--|-----------|--------|------------------|
| This product is a mixture of the substances listed below with the addition of nonhazardous materials. | | | |
| Hazardous Components Specific Chemical Identity: | CAS-No. | % | Hazard Symbol |
| Sodium Phosphate (Wash Buffer) | 7558-79-4 | 48.5 % | Xi (Irritant) |
| Sodium Chloride (Wash Buffer) | 7647-14-5 | 50.0 % | Xi (Irritant) |

| Section 3. Health Hazard Identification | |
|--|---|
| Health Hazards: <i>(Acute and Chronic)</i> | Information pertaining to particular dangers for man and environment. R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin. |

| Section 4. First Aid Measures | |
|--|--|
| Emergency / First Aid Procedures: | <p>General Information: Symptoms of poisoning may even occur after several hours; therefore provide medical observation for at least 48 hours after the accident.</p> <p>Ingestion: If swallowed, seek medical attention immediately. Wash out mouth with water, provided person is conscious. Show physician product label. Never give anything by mouth to an unconscious person.</p> <p>Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention if not breathing becomes difficult.</p> <p>Eye Contact: Rinse opened eye for at least 15 minutes under running water, lifting lower and upper eyelids occasionally. Seek medical attention immediately.</p> <p>Skin Contact: Remove contaminated clothing immediately. Immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention if irritation develops. Wash clothing before reuse.</p> |

| Section 5. Fire and Explosion Hazard Data | |
|--|---|
| Flash Point (Method Used): N/A | Flammable Limits: LEL – N/A UEL – N/A |
| Extinguishing Media: Use ABC multipurpose dry chemical, Carbon dioxide (CO ₂), or water spray. Fight larger fires with water spray or alcohol resistant foam. | |
| Protective Equipment: Firefighters should wear protective equipment and self-contained breathing apparatus. | |
| Unusual Fire and Explosion Hazards: During heating or in case of fire poisonous gases, Nitrogen oxides (NO _x), are produced. | |

Section 6. Accidental Release Measures

Personal Precautions: Place contaminated material in a chemical waste container. No special measures required.

Environmental Precautions: Prevent dispersion of material. Wipe up with damp sponge or mop.

Clean-up Methods: Contact safety officer if questions arise and ventilate area.

Section 7. Handling and Storage

Handling: Protect against physical damage. Ensure good ventilation / exhaustion and do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched.

Storage: Keep container tightly closed. Storage area should be cool, dry, and away from oxidizing and acidic materials as well as heavy-metal compounds.

Other Precautions: Keep respiratory protective device available.

Section 8. Exposure Controls / Personal Protection

Components with limit values that require monitoring: Not Applicable

OSHA-PEL: N/A

REL: N/A

TLV: N/A

Additional Information: Personal Protection listed below are general requirements for laboratory personnel. Follow the usual precautionary measures for handling chemicals / powder. Avoid contact with eyes, skin, and clothing. In the event of use above flash point, use in closed systems. Do not use compressed air by filling, discharging or handling the product. Proper ventilation required. Safety shower and eye bath. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment:

Keep away from food, beverages, and feed.
Wash hands before and after entering laboratory.

Breathing Equipment: In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respiratory.

Hand Protection: Use chemical resistant gloves.

Eye Protection: Wear safety glasses or goggles.

Body Protection: Wear lab coat or other protective work clothing.

Section 9. Physical and Chemical Properties

Appearance and Odor: N/A

Boiling Point: Not determined

Melting Point: Not determined

Density: Not determined

Section 10. Stability and Reactivity

| | | | |
|---|----------------|---|--|
| Stability: | Unstable | | |
| | Stable | X | Conditions to Avoid: Stable under normal storage conditions. |
| Incompatibility (Materials to Avoid): Incompatible with strong oxidizing agents, acids, and heavy metals. | | | |
| Hazardous Decomposition or Byproducts: Chlorine (Cl), Carbon dioxide (CO ₂), Carbon monoxide (CO), Phosphorus oxides, or Nitrogen oxides (NO _x). | | | |
| Hazardous Polymerization: | May Occur | | Conditions to Avoid: Acidic solutions and metal compounds |
| | Will Not Occur | X | |

Section 11. Toxicological Information

LD/LC50 values that are relevant:

Acute Toxicity:

LD₅₀: N/A

Carcinogenicity Classification:

IARC (International Agency for Research on Cancer) – Not Listed

NTP (National Toxicology Program) Not Listed

Eye: Produces irritation.

Inhalation: Irritant if inhaled, coughing possible.

Chronic: Target organs: Cardiovascular system, respiratory system, central nervous system, eyes, kidneys and skin. Prolonged or repeated skin contact may cause dermatitis.

Additional toxicological information: N/A

Section 12. Ecological Information

Ecotoxicity Tests: Water Hazard Class 1. Slightly hazardous for water. The ecological effects have not been thoroughly investigated, but currently none have been identified.

Section 13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with all applicable federal (40 CFR 261.3), state, and local environmental regulations.

RCRA P-Series: None listed.

Contact a licensed professional waste disposal service to dispose of this material if questions arise.

Container Information: Do not remove labels from containers until they have been cleaned.

Section 14. Transport Information

DOT Regulations:

Not Regulated

Land Transport ADR/RID (cross-border):

Not Regulated

Maritime Transport IMDG:

Not Regulated

Air Transport ICAO-TI and IATA-DGR:

Not Regulated

Section 15. Regulatory Information**EU Regulations, Hazard Symbol(s):****Sodium Phosphate:** Xi (Irritant)**Sodium Chloride:** Xi (Irritant)**Risk Phrases:**

R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin.

Safety Phrases:

S 13, Keep away from food, drink, and animal feedstuff.

S 22, Do not breathe dust.

S 24 / 25 / 26, Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36, Wear suitable protective clothing.

S 46, If swallowed, seek medical advice immediately and show this container or label.

Section 16. Other Information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.