MATERIAL SAFETY DATA SHEET

Product Designation

Trade Name: *Anti-Diarrheal Bolus*

Section I – Hazardous Ingredients

Chemical Family: Anti-Diarrheal
Significant ingredients are Attapulgite Clay, Pectin, Carob Powder, and Magnesium Trisilicate.
Information on this form is furnished as a customer service. The information contained herein, to the best of our knowledge, is true and accurate. Any recommendation or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement, or recommendation to practice an invention without authority from the owner.

Section II – Physical and Chemical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Various shades of brown bolus.</td>
</tr>
<tr>
<td>Boiling Point, deg F</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate, %</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure, deg C</td>
<td>Solid at 20 deg C</td>
</tr>
<tr>
<td>Odor</td>
<td>Aspirin odor</td>
</tr>
<tr>
<td>Vapor Density (Air =1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Slightly</td>
</tr>
</tbody>
</table>

Section III – Fire, Reactivity and Explosion Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Non-flammable</td>
</tr>
<tr>
<td>Flammability Classification</td>
<td>N/A</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Large fire: Water fog, Small fire: CO2, halon and dry chemical</td>
</tr>
<tr>
<td>Special Fire Fighting Procedures</td>
<td>Positive-pressure, self-contained breathing apparatus and protective clothing.</td>
</tr>
<tr>
<td>Unusual Fire and Explosion Hazards</td>
<td>Aspirin dust, when suspended in air, is flammable and if ignited, poses a fire and explosion hazard.</td>
</tr>
<tr>
<td>Stability</td>
<td>Stable, store in cool dry place. Avoid extreme heat and fire.</td>
</tr>
<tr>
<td>Incompatibility</td>
<td>None</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Ashing may result in the release of hazardous materials including Carbon Dioxide, Carbon Monoxide, Sulfer and smoke.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Will not occur.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>NA</td>
</tr>
</tbody>
</table>

Section IV – Health Hazard Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routes of entry</td>
<td>Skin, eyes, ingestion, inhalation</td>
</tr>
<tr>
<td>Health Hazard (Acute and chronic):</td>
<td>Skin/eyes: May cause slight temporary eye irritation. Prolonged or repeated exposure may cause skin irritation. Kaolin is classified as a nuisance dust by ACGIH. Ingestion: Single dose oral toxicity is low to moderate. Ingestion of large quantities could cause gastrointestinal irritation and interfere with normal blood clotting. Carcinogenicity: Not Established Toxicity: Not Established. Oral LD50 in rats is probably greater than 20g/kg.</td>
</tr>
<tr>
<td>Emergency and First Aid procedures:</td>
<td>Eye: Flush eyes immediately with water for at least 5 minutes. If irritation develops, get medical attention. Skin: Wash exposed skin with soap and water. Ingestion: If large amount ingested, give 2 glasses of water and seek immediate medical attention.</td>
</tr>
</tbody>
</table>
Section V – Precautions, Spills and Disposal Data

Steps to be taken if material is released or spilled: Sweep up and shovel into clean dry containers. Keep possible ignition sources away from dust.
Waste Disposal Method: Incinerate in compliance with all local, state and federal regulations.
Precautions for Handling and Storing: Store in cool dry place.
Other precautions: Product may be slippery when wet.

Section VI – Special Protection and Controls

Ventilation and Engineering Controls: Local exhaust
Respiratory Protection: Use NIOSH approved dust mask if exposure exceeds TLV.
Protective Gloves and Clothing: None.
Eye and Face Protection: Only to avoid normal dust irritation.
Work/Hygienic practices: Wash hands and exposed skin thoroughly after using the product.

Section VII – MSDS Preparation Dates

Date Prepared: 6-23-2010

Prepared By: Amy Revels

Contact Party
Manufacturer’s Name and Address:
Emergency Telephone Number: 1-800-458-0194
Merrick’s, Inc.
654 Bridge Street
Union Center, WI 53962

MATERIAL SAFETY DATA SHEET

Product Designation

Trade Name: Merrick’s Aspirin Bolus

Section I – Hazardous Ingredients

Chemical Family: 2-acetyloxybenzoic acid


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Section II – Physical and Chemical Data

Appearance: White solid dose boluses.
Boiling Point, deg F: N/A
Evaporation Rate: N/A
Vapor Pressure: Solid at 20 deg C
Odor: Aspirin odor

Section III – Fire, Reactivity and Explosion Data

Flash Point: N/A
Flammability Classification: N/A
Extinguishing Media: Large fire: Water fog. Small fire: CO2, halon and dry chemical
Special Fire Fighting Procedures: Positive-pressure, self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion Hazards: Aspirin dust, when suspended in air, is flammable and if ignited, poses a fire and explosion hazard.
Stability: Stable, store in cool dry place. Avoid extreme heat and fire.
Incompatibility: Oxidizing materials
Hazardous Decomposition Products: Carbon dioxide, acetic acid and salicylic acid
Hazardous Polymerization: Will not occur.

Section IV – Health Hazard Data

Routes of entry: Skin, eyes, ingestion
Health Hazard (Acute and chronic): Skin/eyes: May cause slight temporary eye irritation. Prolonged or repeated exposure may cause skin irritation.
Ingestion: Single dose oral toxicity is low to moderate. Ingestion of large quantities could cause gastrointestinal irritation and interfere with normal blood clotting.
Carcinogenicity: Toxicity: Oral LD50: 600-1400 mg/kg (rat)
Emergency and First Aid procedures:
  Eye/skin contact: Flush eyes immediately with water for at least 5 minutes. Wash off exposed skin with water.
  Ingestion: Induce vomiting if large amounts are ingested

Section V – Precautions, Spills and Disposal Data

Steps to be taken if material is released or spilled: Sweep up and shovel into clean dry containers. Keep possible ignition sources away from dust.
Waste Disposal Method: Incinerate in compliance with all local, state and federal regulations.
Precautions for Handling and Storing: Store in cool dry place.
Other precautions: Dust, when suspended in air, is flammable and if ignited, may pose and explosion hazard. Good housekeeping and dust control are essential.
Section VI – Special Protection and Controls

Ventilation and Engineering Controls: Local exhaust
Respiratory Protection: None needed with normal use with product.
Protective Gloves and Clothing: Cloth or rubber
Eye and Face Protection: Only to avoid normal dust irritation.
Work/Hygienic practices: Wash hands and exposed skin thoroughly after using the product.

Section VII – MSDS Preparation Dates

Date Prepared: 1-11-07
Prepared By: Jill Plonka

Contact Party
Manufacturer’s Name and Address:
Merrick’s, Inc.
654 Bridge Street
Union Center, WI  53962

MATERIAL SAFETY DATA SHEET

Product Designation

Trade Name: DFM Bolus w/Omni-bos CB Plus

Section I – Hazardous Ingredients

Chemical Name: NO HAZARDOUS CHEMICALS
Information on this form is furnished as a customer service. The information contained herein, to the best of our knowledge, is true and accurate. Any recommendation or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement, or recommendation to practice an invention without authority from the owner.

Section II – Physical and Chemical Data

Appearance: Bolus tablet
Boiling Point, deg F: N/A
Evaporation Rate: N/A
Vapor Pressure: N/A
Odor:

Vapor Density (Air =1): N/A
Specific Gravity: 3.5
Solubility: Slight < 1%

Section III – Fire, Reactivity and Explosion Data

Flash Point: N/A
Flammability Classification: N/A
Extinguishing Media: Foam, dry powder, or water.
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: Only usual hazard from organic dust, control ignition sources, avoids creating clouds of dust.
Stability: Stable, store in cool dry place.
Incompatibility: N/A
Hazardous Decomposition Products: N/A
Hazardous Polymerization: Will not occur.

Section IV – Health Hazard Data

Effects of Overexposures – Long Term: Can be irritating to the respiratory tract. Prolonged exposure to silica dust may result in silicosis, a fibrotic lung disease.
Effects of Overexposures – Short Term: Ingestion of very large quantities may result in intestinal obstruction and or constipation. Considered to be of very low toxicity.

First Aid: Eye contact: Irrigate with water.
Skin contact: Wash with water.
Inhalation: Remove to fresh air.
Ingestion: N/A

Section V – Permissible Exposure Limits

(OSHA, Manufacturer, Other): OSHA PEL = N/A, ACGIH TLV = 10 mg/m3 (TWA)

Section VI – Precautions, Spills and Disposal Data

Precautions for Handling and Storing: Store in cool dry place for maximum feed efficiency.
**Waste Disposal Method:** Dispose in approved solid waste disposal is per current regulations.  
**Spills or Leaks:** Dry sweep, or flush with water.

### Section VII – Special Protection and Controls

- **Ventilation and Engineering Controls:** Recommended  
- **Respiratory Protection:** Dust masks to avoid inhalation.  
- **Protective Gloves and Clothing:** Only if skin irritation exists.  
- **Eye and Face Protection:** Only to avoid normal dust irritation.  
- **Special Protective Measures for Maintenance Work:** Avoid ignition sources, avoid creating clouds of dust.

### Section VIII – MSDS Preparation Dates

- **Date Prepared:** 12-18-12  
- **Prepared By:** RMC

---

**Contact Party**

**Manufacturer’s Name and Address:**  
**Emergency Telephone Number:** 1-800-458-0194  
Merrick’s, Inc.  
654 Bridge Street  
Union Center, WI 53962

MATERIAL SAFETY DATA SHEET

Product Designation

Trade Name: Laxcid Bolus

Section I – Hazardous Ingredients

Chemical Name: NO HAZARDOUS CHEMICALS
Information on this form is furnished as a customer service. The information contained herein, to the best of our knowledge, is true and accurate. Any recommendation or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement, or recommendation to practice an invention without authority from the owner.

Section II – Physical and Chemical Data

Appearance: Bolus tablet
Boiling Point, deg F: N/A
Evaporation Rate: N/A
Vapor Pressure: N/A
Vapor Density (Air =1): N/A
Specific Gravity: 3.5
Solubility: Slight < 1%

Section III – Fire, Reactivity and Explosion Data

Flash Point: N/A
Flammability Classification: N/A
Extinguishing Media: Foam, dry powder, or water.
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: Only usual hazard from organic dust, control ignition sources, avoids creating clouds of dust.
Stability: Stable, store in cool dry place.
Incompatibility: N/A
Hazardous Decomposition Products: N/A
Hazardous Polymerization: Will not occur.

Section IV – Health Hazard Data

Effects of Overexposures – Long Term: Can be irritating to the respiratory tract. Prolonged exposure to silica dust may result in silicosis, a fibrotic lung disease.
Effects of Overexposures – Short Term: Ingestion of very large quantities may result in intestinal obstruction and or constipation. Considered to be of very low toxicity.

First Aid: Eye contact: Irrigate with water.
Skin contact: Wash with water.
Inhalation: Remove to fresh air.
Ingestion: N/A

Section V – Permissible Exposure Limits

(OSHA, Manufacturer, Other): OSHA PEL = N/A, ACGIH TLV = 10 mg/m3 (TWA)

Section VI – Precautions, Spills and Disposal Data
Precautions for Handling and Storing: Store in cool dry place for maximum feed efficiency.
Waste Disposal Method: Dispose in approved solid waste disposal is per current regulations.
Spills or Leaks: Dry sweep, or flush with water.

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**Section VII – Special Protection and Controls**

Ventilation and Engineering Controls: Recommended
Respiratory Protection: Dust masks to avoid inhalation.
Protective Gloves and Clothing: Only if skin irritation exists.
Eye and Face Protection: Only to avoid normal dust irritation.
Special Protective Measures for Maintenance Work: Avoid ignition sources, avoid creating clouds of dust.

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**Section VIII – MSDS Preparation Dates**

Date Prepared: 03/27/2008

Prepared By:

---

**Contact Party**

**Manufacturer’s Name and Address:**

Emergency Telephone Number: 1-800-458-0194

Merrick’s, Inc.

654 Bridge Street

Union Center, WI 53962

MATERIAL SAFETY DATA SHEET

Product Designation

Trade Name: Niacin/B Complex Bolus

Section I – Hazardous Ingredients

Chemical Name: Niacinamide

Information on this form is furnished as a customer service. The information contained herein, to the best of our knowledge, is true and accurate. Any recommendation or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement, or recommendation to practice an invention without authority from the owner.

Section II – Physical and Chemical Data

Appearance: Bolus tablet
Boiling Point, deg F: N/A
Evaporation Rate: N/A
Vapor Pressure: N/A
Vapor Density (Air =1): N/A
Specific Gravity: 3.5
Solubility: Slight < 1%

Odor:

Section III – Fire, Reactivity and Explosion Data

Flash Point: N/A
Flammability Classification: N/A
Extinguishing Media: Foam, dry powder, or water.
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: Only usual hazard from organic dust, control ignition sources, avoids creating clouds of dust.
Stability: Stable, store in cool dry place.
Incompatibility: N/A
Hazardous Decomposition Products: N/A
Hazardous Polymerization: Will not occur.

Section IV – Health Hazard Data

Effects of Overexposures – Long Term: Can be irritating to the respiratory tract. Prolonged exposure to silica dust may result in silicosis, a fibrotic lung disease.
Effects of Overexposures – Short Term: Ingestion of very large quantities may result in intestinal obstruction and or constipation. Considered to be of very low toxicity.

First Aid: Eye contact: Irrigate with water.
Skin contact: Wash with water.
Inhalation: Remove to fresh air.
Ingestion: N/A

Section V – Permissible Exposure Limits

(OSHA, Manufacturer, Other): OSHA PEL = N/A, ACGIH TLV = 10 mg/m3 (TWA)

Section VI – Precautions, Spills and Disposal Data

Precautions for Handling and Storing: Store in cool dry place for maximum feed efficiency.
Waste Disposal Method: Dispose in approved solid waste disposal is per current regulations.
Spills or Leaks: Dry sweep, or flush with water.

Section VII – Special Protection and Controls

Ventilation and Engineering Controls: Recommended
Respiratory Protection: Dust masks to avoid inhalation.
Protective Gloves and Clothing: Only if skin irritation exists.
Eye and Face Protection: Only to avoid normal dust irritation.
Special Protective Measures for Maintenance Work: Avoid ignition sources, avoid creating clouds of dust.

Section VIII – MSDS Preparation Dates

Date Prepared: 12-18-12
Prepared By: RMC

Contact Party
Manufacturer’s Name and Address:
Emergency Telephone Number: 1-800-458-0194
Merrick’s, Inc.
654 Bridge Street
Union Center, WI 53962

Product Designation

Trade Name: Uterine/Proteolytic Bolus

Section I – Hazardous Ingredients

Chemical Name: Urea
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Section II – Physical and Chemical Data

Appearance: Bolus tablet
Boiling Point, deg F: N/A
Evaporation Rate: N/A
Vapor Pressure: N/A
Vapor Density (Air =1): N/A
Specific Gravity: 3.5
Solubility: Slight < 1%
Odor:

Section III – Fire, Reactivity and Explosion Data

Flash Point: N/A
Flammability Classification: N/A
Extinguishing Media: Foam, dry powder, or water.
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: Only usual hazard from organic dust, control ignition sources, avoids creating clouds of dust.
Stability: Stable, store in cool dry place.
Incompatibility: N/A
Hazardous Decomposition Products: N/A
Hazardous Polymerization: Will not occur.

Section IV – Health Hazard Data

Effects of Overexposures – Long Term: Can be irritating to the respiratory tract. Prolonged exposure to silica dust may result in silicosis, a fibrotic lung disease.
Effects of Overexposures – Short Term: Ingestion of very large quantities may result in intestinal obstruction and or constipation. Considered to be of very low toxicity.

First Aid: Eye contact: Irrigate with water.
Skin contact: Wash with water.
Inhalation: Remove to fresh air.
Ingestion: N/A

Section V – Permissible Exposure Limits

(OSHA, Manufacturer, Other): OSHA PEL = N/A, ACGIH TLV = 10 mg/m3 (TWA)

Section VI – Precautions, Spills and Disposal Data

Precautions for Handling and Storing: Store in cool dry place for maximum feed efficiency.
### Section VII – Special Protection and Controls

- **Ventilation and Engineering Controls:** Recommended
- **Respiratory Protection:** Dust masks to avoid inhalation.
- **Protective Gloves and Clothing:** Only if skin irritation exists.
- **Eye and Face Protection:** Only to avoid normal dust irritation.
- **Special Protective Measures for Maintenance Work:** Avoid ignition sources, avoid creating clouds of dust.

### Section VIII – MSDS Preparation Dates

<table>
<thead>
<tr>
<th>Date Prepared:</th>
<th>12-18-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared By:</td>
<td>RMC</td>
</tr>
</tbody>
</table>

### Contact Party

**Manufacturer’s Name and Address:**

**Emergency Telephone Number:** 1-800-458-0194

Merrick’s, Inc.

654 Bridge Street

Union Center, WI 53962