*** Section 1 – Chemical Product and Company Identification ***

Chemical Name: Sodium Polyacrylate, Crosslinked

Zappa Tec, LLC
828 Knox Road
McLeansville, NC 27301
Phone: (888) 369-8704
Emergency #: (800) 424-9300 CHEMTREC

*** Section 2 – Composition / Information on Ingredients ***

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>9003-04-7</td>
<td>Sodium polyacrylate</td>
<td>&gt;99</td>
</tr>
<tr>
<td>Not Available</td>
<td>Post Treated – Trade Secret</td>
<td>0</td>
</tr>
</tbody>
</table>

Component Information/Information on Non-Hazardous Components
The components of this product are not regulated as hazardous under 29 CFR and 49 CFR. However, the manufacturer recognizes the potential for respiratory tract irritation as a result of inhalation of this material as a respirable dust. See Sections 8, 11, 14, and 15 for further regulatory information.

*** Section 3 – Hazard Identification ***

Emergency Overview
Sodium polyacrylate is a white, granular, odorless polymer that yields a gel-like material with the addition of water. It is insoluble in water and causes extremely slippery conditions when wet. Although not regulated as a hazardous material, the respirable dust is a potential respiratory tract irritant. The manufacturer recommends an eight-hour exposure limit of 0.05 mg/m³.

Potential Health Effects: Eyes
Dust may cause burning, drying, itching and other discomfort, resulting in reddening of the eyes.

Potential Health Effects: Skin
Exposure to the dust, such as in manufacturing, may aggravate existing skin conditions due to drying effect.

Potential Health Effects: Ingestion
Although not a likely route of entry, tests have shown that polyacrylate absorbents are non-toxic if ingested. However, as in any instance of non-food consumption, seek medical attention in the event of any adverse symptoms.

Potential Health Effects: Inhalation
Exposure to respirable dust may cause respiratory tract and lung irritation and may aggravate existing respiratory conditions.

HMIS Ratings: Health: 1  Fire: 0  Reactivity: 0
Hazard Scale: 0=Minimal  1=Slight  2=Moderate  3=Serious  4=Severe  *=Chronic hazard

*** Section 4 – First Aid Measures ***

First Aid: Eyes
Immediately flush eyes with plenty of water for at least 15 minutes.

First Aid: Skin
Remove polyacrylate absorbent dust from skin using soap and water.

First Aid: Ingestion
Non-toxic by ingestion. However, if adverse symptoms appear, seek medical attention.
Material Safety Data Sheet

ZapZorb

First Aid: Inhalation
If inhaled, move to source of fresh air. Seek medical attention if symptoms persist.

*** Section 5 – Fire Fighting Measures ***

General Fire Hazards
No recognized fire hazards associated with the finished product.

Upper Flammable Limit (UFL): NE
Lower Flammable Limit (LFL): NE
Method Used: None
Flash Point: None
Flammability Classification: None

Hazardous Combustion Products
None known.

Extinguishing Media
Dry Chemical, foam, carbon dioxide, water fog. Extremely slippery conditions are created if spilled product comes in contact with water.

Fire Fighting Equipment/Instructions
Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0
Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

*** Section 6 – Accidental Release Measures ***

Containment Procedures
Sweep or vacuum material when possible and shovel into a waste container.

Clean-Up Procedures
Use caution after contact of product with water as extremely slippery conditions will result. Residuals may be flushed with water into the drain for normal wastewater treatment. This is a non-hazardous waste suitable for disposal in an approved solid waste landfill.

Evacuation Procedures
None Required.

Special Procedures
Avoid respirable dust inhalation during clean-up. Wear appropriate respirator.

*** Section 7 – Handling and Storage ***

Handling Procedures
Handle as an eye and respiratory tract irritant.

Storage Procedures
Store in a dry, closed container.

*** Section 8 – Exposure Controls / Personal Protection ***

Exposure Guidelines
A: General Product Information
This product is not regulated as a hazardous material. However, the manufacturer recognizes the potential for respiratory tract irritation and recommends an eight hour exposure limit of 0.05 mg/m³.
Material Safety Data Sheet

ZapZorb

MSDS ID: ZT/ZZ

B: Component Exposure Limits
No information is available.

Engineering Controls
Provide local exhaust ventilation to maintain worker exposure to less than 0.5 mg/m³ over an eight-hour period.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/face
Wear safety glasses with side shields or goggles.

Personal Protective Equipment: Skin
Use impervious gloves when handling the product in the manufacturing environment.

Personal Protective Equipment: Respiratory
Wear respirator with a high efficiency filter if particulate concentrations in the work area exceed 0.05 mg/m³ over an eight-hour period.

Personal Protective Equipment: General
Obey reasonable safety precautions and practice good housekeeping. Wash thoroughly after handling.

*** Section 9 – Physical & Chemical Properties ***

Appearance: White granular Powder
Physical State: Solid
Vapor Pressure: <10 mm Hg
Boiling Point: NE
Solubility (H2O): Not soluble.
Evaporation Rate: <1.0
Odor: None
PH: 5.5-6.5 (1% in water)
Vapor Density: NE
Melting Point: >390 F
Specific Gravity: 0.4-0.7 g/ml

*** Section 10 – Chemical Stability & Reactivity Information ***

Chemical Stability
The product is stable.

Chemical Stability: Conditions to Avoid
None

Incompatibility
None

Hazardous Decomposition
None known.

Hazardous Polymerization
Will not occur.

*** Section 11 – Toxicological Information ***

Acute and Chronic Toxicity

A: General Product Information
Acute inhalation of respirable dust may cause irritation of the upper respiratory tract and lungs.

B: Acute Toxicity-LD50/LC50
Sodium polyacrylate (9003-04-7)
LD50: Oral LD50 Rat: 40gm/kg

Carcinogenicity

Component Carcinogenicity
No information is available.
Chronic Toxicity
Chronic inhalation exposure to rats for a lifetime (two years) using sodium polyacrylate that had been micronized to a respirable particle size (less than 10 microns) produced non-specific inflammation and chronic lung injury at 0.2 mg/m$^3$ and 0.8 mg/m$^3$. Also, at 0.8 mg/m$^3$, tumors were seen in some test animals. In the absence of chronic inflammation, tumors are not expected. There were no adverse effects detected at 0.05 mg/m$^3$.

Mutagenicity
Sodium polyacrylate had no effect in mutagenicity tests.

*** Section 12 – Ecological Information ***

Ecotoxicity
A: General Product Information
Composted polyacrylate absorbents are nontoxic to aquatic or terrestrial organisms at predicted exposure levels from current application rates.

B: Component Analysis – Ecotoxicity – Aquatic Toxicity
No information available.

Environmental Fate
Polyacrylate absorbents are relatively inert in aerobic and anaerobic conditions. They are immobile in landfills and soil systems (>90% retention), with the mobile fraction showing biodegradability. They are also compatible with incineration of municipal solid waste. Incidental down-the-drain disposal of small quantities of polyacrylic absorbents will not affect the performance of wastewater treatment systems.

*** Section 13 – Disposal Considerations ***

US EPA Waste Number & Descriptions
A: General Product Information
This product is a non-hazardous waste material suitable for approved solid waste landfills.

B: Component Waste Numbers
No EPA Waste Numbers are applicable for this product’s components.

Disposal Instructions
Dispose of in accordance with Local, State and Federal regulations.

*** Section 14 – Transportation Information ***

International Transportation Regulations
This product is not transport regulated.

*** Section 15 – Regulatory Information ***

US Federal Regulations
A: General Product Information
This product is not Federally regulated as a hazardous material.

B: Clean Air Act
No information is available.

C: Component Analysis
No information is available.

D: Food & Drug Administration
CFR references for the FDA regulated components in this product are listed.

Sodium polyacrylate (9003-04-7)
Direct Food Additives: 173.73, 173.310
Indirect Food Additives: 175.105
State Regulations
A: General Product Information
   This product is not regulated by any State as a hazardous material.
B: Component Analysis - State
   None of this product’s components are listed on the state lists from CA, FL, MA, MN, NJ, or PA.
Component Analysis – WHMIS IDL
   No components are listed in the WHMIS IDL.
Component Analysis – Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
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<tbody>
<tr>
<td>Sodium polyacrylate</td>
<td>9003-04-7</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
</tbody>
</table>

*** Section 16 – Other Information ***

Other Information
The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer’s responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

Contact: Product Compliance Officer
Contact Phone: (888) 369-8704