MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material Name (Trade Name): Triplicity

Company: Calcium Products, Inc.
Post Office Box 281
Gilmore City, Iowa 50541
Emergency Phone: 515-373-6552
www.calciumproducts.com

Chemical Name: Calcium Carbonate, Lignite, Sugar, Stimulate, Calcium Lignin Sulfonate

Chemical Formula: Not Applicable

Molecular Weight: Not Applicable

Synonyms: Lime, limestone, leonardite Sucrose, polysaccharide, lignosulfonate

DOT Identification: None

Limestone CAS #: 1317-65-3
Leonardite CAS #: 68525-81-5
Sugar CAS #: 57-50-1
Calcium Lignin Sulfonate CAS #: 8061-52-7
Stimulate CAS #: - N/A

Not a herbicide or pesticide and not required to be registered by E.P.A.

2. Hazards Identification

Emergency overview: Prolonged exposure may cause chronic effects. This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica.

Potential health effects

Routes of exposure: Inhalation.

Eyes: Dust or powder may irritate eye tissue.

Skin: Not expected to be a primary skin irritant. No hazard in normal industrial use.

Inhalation: Repeated or prolonged inhalation may cause toxic effects. For additional information on inhalation hazards, see Section 11 of this safety data sheet.

Ingestion: No significant adverse effects are expected upon ingestion of the product. Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

Target organs: Respiratory system.

Chronic effects: This product has no known chronic effects. Repeated or prolonged exposure to this compound is not known to aggravate medical conditions.

Acute Health Effects: Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound. This product is not listed by NTP, IARC or regulated as a Carcinogen by OSHA.

Chronic Health Effects: None known
3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Percent</th>
<th>MSHA/OSHA PEL</th>
<th>ACGIH TLV-TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>96%</td>
<td>(R) 10 mg/m³ /(% SiO₂ +2)</td>
<td>(R) #5 mg/m</td>
</tr>
<tr>
<td>Lignite*</td>
<td>68525-81-5</td>
<td>2%</td>
<td>10 mg/m³ Total Dust</td>
<td>15 mg/m³ Total Dust</td>
</tr>
<tr>
<td>Sugar</td>
<td>57-50-1</td>
<td>1%</td>
<td>15 mg/m³, Total Dust</td>
<td>10 mg/m³, Total Dust</td>
</tr>
<tr>
<td>Calcium Lignin Sulfonate</td>
<td>8061-52-7</td>
<td>1%</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Composition comments: *This product contains naturally occurring crystalline silica (not listed in Annex I of Directive 67/548/EEC) in quantities less than 6%.

4. First Aid Measures

First aid procedures
- **Eye contact**: Mild irritant; Flush eyes with water as a precaution. Get medical attention if irritation develops or persists.
- **Skin contact**: Wash off with soap and water. May irritate mucus membranes Get medical attention if irritation develops or persists.
- **Inhalation**: Move to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Call a physician if symptoms develop or persist.
- **Ingestion**: No need for first aid is anticipated if material is swallowed. Dust in throat and nasal passages should clear spontaneously. If ingestion of a large amount does occur, seek medical attention.

Notes to physician: Provide general supportive measures and treat symptomatically.

General advice: If you feel unwell, seek medical advice (show the label where possible)

5. Fire Fighting Measures

- **Flammability**: Non-Flammable
- **Flash Points**: Not Applicable
- **Auto-Ignition**: Not Applicable
- **Flammable Limits**: Not Applicable
- **Incompatibility**: None Known
- **Extinguishing Media**: Water spray. Carbon dioxide, dry chemical powder or appropriate foam.
- **Fire Fighting Procedure**: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- **Fire/Explosion Hazards**: May emit fumes under fire conditions. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons

6. Accidental Release Measures

- **Personal precautions**: Respiratory Protection (Type) NIOSH-MSHA approved dust respirators for conditions where dust levels exceed limits. Protective Gloves Not needed. Eye Protection Safety goggles with side shields or goggles. Other Protective Clothing Not necessary
- **Environmental precautions**: No special environmental precautions required. Prevent further leakage or spillage if safe to do so.
- **Methods for containment**: Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water
Methods for cleaning up: Avoid the generation of dusts during clean-up. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Flush area with water to remove trace residue.

7. Handling and Storage
Handling: Respirable dust may be generated during processing or handling. The controls identified in Section 6 should be applied as appropriate.
Storage: Keep the container dry. Keep in a cool, well-ventilated place. Guard against dust accumulation of this material.
Storage Temperatures: Store at ambient temperature
Shelf Life: Unlimited in tightly closed container.
Special Sensitivity: None
Handling/Storage Precautions: Avoid breathing dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Store in a dry place away. Reseal containers immediately after use. Store away from food and beverages.
Other Precautions: None Known
Steps in Case Material is Spilled: Pick up and reuse clean materials. Dispose of waste materials only in accordance with applicable federal, state and local laws and regulations

8. Exposure Controls / Personal Protection
Exposure guidelines: Occupational exposure to nuisance dust (total and respirable) and should be monitored and controlled.
Engineering controls: If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.
Personal protective equipment:
Eye / face protection: Wear dust goggles. Eye wash fountain is recommended.
Skin protection: No special protective equipment required. Normal work clothing (long sleeved shirts and long pants) is recommended. Employees should wash their hands and face before eating, drinking or using tobacco products.
Respiratory protection: Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
General hygiene considerations:
Use good industrial hygiene practices in handling this material. There are no known hazards associated with this material when used as recommended

9. Physical & Chemical Properties
Appearance: Granular.
Color: Brown Tan.
Odor: slight sweet odor
Odor threshold: Not available.
Physical state: Solid.
Form: Granulated Powder.
P H: 7.0
Melting point: Not available.
Boiling point: Not available.
Flash point: Non-flammable
Evaporation rate: Not available.
Flammability: Not available.
Flammability limits in air, upper, % by volume: Not available.
Flammability limits in air, lower, % by volume: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Specific gravity: Not available.
Relative density 65 lbs/cubic foot.
Solubility (water): Not available.
Partition coefficient (n-octanol/water): Not available.
**10. Chemical Stability & Reactivity Information**

*Chemical stability:* Stable at normal conditions.

*Conditions to avoid:* Contact with incompatible materials

*Incompatible materials (Materials to avoid):* Contact with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride may cause fire and/or explosions. Strong oxidizing agents.

*Hazardous decomposition products:* Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

*Possibility of hazardous reactions:* Not available.

*Hazardous Polymerization:* Will Not occur

*Instable Conditions:* Excessive temperatures (see Incompatibilities).

*Decomposition Temperature:* Not Established

*Decomposition products:* Oxides of Carbon

**11. Toxicological Information**

*Routes of Exposure:* Eye contact. Ingestion. Inhalation. Skin contact.

*Chronic Toxic Effects:* This product has no known chronic effects. Repeated or prolonged exposure to this compound is not known to aggravate medical conditions.

*Acute Toxic Effects:* Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. It has been reported that there may be a silicosis risk when using impure limestone containing in excess of 3% quartz. However, it is claimed that pure calcium carbonate does not cause pneumoconiosis. Adverse health effects have generally not been reported in literature among workers using CaCO3. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

**12. Ecological Information**

*Ecotoxicity:* This material is not expected to be harmful to aquatic life.

*Environmental effects:* Bioaccumulation would not be expected.

*Persistence and degradability:* Not available.

**13. Disposal Considerations**

*Disposal instructions:* Collect and reuse clean materials. Dispose of waste materials only in accordance with applicable federal, state, and local laws and regulations.

**14. Transport Information**

*DOT:* Not regulated as dangerous goods.

*IATA:* Not regulated as dangerous goods.

*IMDG:* Not regulated as dangerous goods.

*PLACARD REQUIRED:* None

*LABEL REQUIRED:* Label as required by the OSHA Hazard Communication standard {29 CFR 1910.1200(f)}, and applicable state and local regulations.

**15. Regulatory Information**
US federal regulations OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.

CERCLA (Superfund) reportable quantity: None

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard categories Immediate Hazard - No
Delayed Hazard: No
Fire Hazard: No
Pressure Hazard: No
Reactivity Hazard: No
Section 302 extremely hazardous substance: No
Section 311 hazardous chemical: No

California Proposition 65: To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

SARA 313 Title III:
Section 302 Extremely Hazardous Substances: None
Section 311/312 Hazardous Categories: None
Section 313 Toxic Chemicals: None

16. Other Information

Further information: This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

NFPA ratings: Health: 1
Flammability: 0
Instability: 0

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use. Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.