## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier
- **Product form**: Substance
- **Substance name**: CALCIUM LACTATE
- **Chemical name**: Calcium Lactate Anhydrous
- **CAS No**: 814-80-2
- **Product code**: 2209 & 2261
- **Formula**: Ca(C₃H₅O₃)₂

### 1.2. Relevant identified uses of the substance or mixture and uses advised against
- **Use of the substance/mixture**: Food-stuff industry.

### 1.3. Details of the supplier of the safety data sheet
- **Jost Chemical Co.**
  - 8150 Lackland Rd.
  - Saint Louis, Missouri 63114
  - T 314-428-4300 - F 314-428-4366
  - www.jostchemical.com

### 1.4. Emergency telephone number
- **Emergency number**: CHEMTREC 800-424-9300

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture
- **Classification (GHS-US)**
  - Not classified

### 2.2. Label elements
- **GHS-US labeling**: No labeling applicable

### 2.3. Other hazards
- **No additional information available

### 2.4. Unknown acute toxicity (GHS US)
- **Not applicable

## SECTION 3: Composition/information on ingredients

- **3.1. Substance**
  - **Substance type**: Mono-constituent
  - **Full text of H-phrases: see section 16

- **3.2. Mixture**
  - **Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures
- **First-aid measures after inhalation**: Remove person to fresh air and keep comfortable for breathing. Move the affected person away from the contaminated area and into the fresh air. If not breathing, give artificial respiration. Get medical advice/attention if you feel unwell.
- **First-aid measures after skin contact**: Immediately remove contaminated clothing or footwear. Wash skin with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- **First-aid measures after eye contact**: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists. Rinse eyes with water as a precaution.
- **First-aid measures after ingestion**: Drink plenty of water. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed

| Symptoms/injuries after inhalation | None under normal use. |
| Symptoms/injuries after skin contact | Red skin. |
| Symptoms/injuries after eye contact | May cause slight irritation. |
| Symptoms/injuries after ingestion | No effects known. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media


5.2. Special hazards arising from the substance or mixture

| Fire hazard | Not flammable. |
| Explosion hazard | No direct explosion hazard. |
| Reactivity | Upon combustion: CO and CO2 are formed. Thermal decomposition generates toxic vapors. |

5.3. Advice for firefighters

Firefighting instructions: Cool down the containers exposed to heat with a water spray. Dilute toxic gases with water spray.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Complete protective clothing. Self-contained breathing apparatus. Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel


Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes. Avoid creating or spreading dust.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8 : Exposure controls/personal protection”.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Collect all waste in suitable and labeled containers and dispose according to local legislation.

Methods for cleaning up: Recover mechanically the product. Dispose of contaminated materials in accordance with current regulations.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8 : Exposure controls/personal protection”.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid the formation or spread of dust in the atmosphere. Dust extraction (suction). Ensure good ventilation of the work station.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations. Does not require any specific or particular measures.

Storage conditions: Keep container tightly closed and dry. Store in a cool, well-ventilated place. Store in a well-ventilated place. Keep cool.

Incompatible products: Strong oxidizing agents.
CALCIUM LACTATE
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls
Appropriate engineering controls: Ensure good ventilation of the work station. Extraction to remove dust at its source.
Personal protective equipment:

Materials for protective clothing: nitrile rubber.
Hand protection: Gloves.
Eye protection: Chemical goggles or safety glasses. Safety glasses.
Skin and body protection: In case of dust production: dustproof clothing.
Respiratory protection:
- Dust production: dust mask with filter type P1.

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Powder</td>
</tr>
<tr>
<td>Color</td>
<td>white</td>
</tr>
<tr>
<td>Odor</td>
<td>slight</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>240 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>218.22 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Partially soluble. Water: 9 g/100ml</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available
SECTION 10: Stability and reactivity

10.1. Reactivity
Upon combustion: CO and CO2 are formed. Thermal decomposition generates toxic vapors.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None under normal conditions.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
Calcium oxides. Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- **Acute toxicity**: Not classified (Lack of data)
- **Skin corrosion/irritation**: Not classified (Lack of data)
- **Serious eye damage/irritation**: Not classified (Lack of data)
- **Respiratory or skin sensitization**: Not classified (Lack of data)
- **Germ cell mutagenicity**: Not classified (Lack of data)
- **Carcinogenicity**: Not classified (Lack of data)
- **Reproductive toxicity**: Not classified (Lack of data)
- **Specific target organ toxicity (single exposure)**: Not classified (Lack of data)
- **Specific target organ toxicity (repeated exposure)**: Not classified (Lack of data)
- **Aspiration hazard**: Not classified (Not applicable)
- **Symptoms/injuries after inhalation**: None under normal use.
- **Symptoms/injuries after skin contact**: Red skin.
- **Symptoms/injuries after eye contact**: May cause slight irritation.
- **Symptoms/injuries after ingestion**: No effects known.

SECTION 12: Ecological information

12.1. Toxicity

- **Ecology - general**: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available
12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.
Waste disposal recommendations : Avoid release to the environment. Remove to an authorized dump.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated for transport

Additional information
Other information : No supplementary information available.

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

CALCIUM LACTATE (814-80-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

CALCIUM LACTATE (814-80-2)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Listed on Non-Domestic Substances List (NDSL)

EU-Regulations

CALCIUM LACTATE (814-80-2)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Not classified

National regulations

CALCIUM LACTATE (814-80-2)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on INSQ (Mexican national inventory of Chemical Substances)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)

15.3. US State regulations
## SECTION 16: Other information

**Indication of changes**

- Initial SDS.

**NFPA health hazard**

- 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

**NFPA fire hazard**

- 0 - Materials that will not burn.

**NFPA reactivity**

- 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

### HMIS III Rating

<table>
<thead>
<tr>
<th>Health</th>
<th>1 Slight Hazard - Irritation or minor reversible injury possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>0 Minimal Hazard - Materials that will not burn</td>
</tr>
<tr>
<td>Physical</td>
<td>0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>E - Safety glasses, Gloves, Dust respirator</td>
</tr>
</tbody>
</table>

**SDS US Custom (-ADR)**

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*