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

### 1.1. Product identifier

<table>
<thead>
<tr>
<th><strong>Product form</strong></th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Substance name</strong></td>
<td>Calcium Phosphate Dibasic, Anhydrous</td>
</tr>
<tr>
<td><strong>Chemical name</strong></td>
<td>Calcium Phosphate dibasic anhydrous</td>
</tr>
<tr>
<td><strong>CAS No</strong></td>
<td>7757-93-9</td>
</tr>
<tr>
<td><strong>Product code</strong></td>
<td>2165, 2167, 2277, 2278, 2318</td>
</tr>
<tr>
<td><strong>Formula</strong></td>
<td>CaHPO$_4$</td>
</tr>
<tr>
<td><strong>BIG no</strong></td>
<td>39055</td>
</tr>
</tbody>
</table>

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

| **Use of the substance/mixture** | Animal feeding stuff: additive |
| **** | Pharmaceutical product: component |
| **** | Fertilizer |
| **** | Dyestuff/pigment |
| **** | Paint: component |
| **** | Chemical intermediate |
| **** | Cosmetic product: component |
| **** | Food industry: additive |

### 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 telephone 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

| **Other hazards not contributing to the classification** | None under normal conditions. |

### 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 general: If you feel unwell, seek medical advice.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact: Rinse with water. Take victim to a doctor if irritation persists. Wash skin with plenty of water.

First-aid measures after eye contact: Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists. Rinse eyes with water as a precaution.


4.2. Most important symptoms and effects, both acute and delayed


Symptoms/injuries after skin contact: No data available.

Symptoms/injuries after eye contact: Slight irritation.

Symptoms/injuries after ingestion: No data available.

Chronic symptoms: 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


Unsuitable extinguishing media: No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard: DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard: INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard".


5.3. Advice for firefighters

Precautionary measures fire: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions: Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Dilute toxic gases with water spray.


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. Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes. In case of reactivity hazard: consider evacuation.

Measures in case of dust release: In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

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. Prevent entry to sewers and public waters.
6.3. Methods and material for containment and cleaning up

For containment:

- Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. Take account of toxic/corrosive precipitation water. On heating: dilute combustible/toxic gases/vapours.

Methods for cleaning up:

- Recover mechanically the product. Prevent dust cloud formation. Scoop solid spill into closing containers. See "Material-handling" for suitable container materials. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

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:


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:

- Does not require any specific or particular measures.

Storage conditions:


Incompatible materials:

- Strong oxidizers.

Heat-ignition:

- KEEP SUBSTANCE AWAY FROM: heat sources.

Prohibitions on mixed storage:

- KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases.

Storage area:

- Store in a dry area. Meet the legal requirements.

Special rules on packaging:

- SPECIAL REQUIREMENTS: closing. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials:

- SUITABLE MATERIAL: No data available. MATERIAL TO AVOID: No data available.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Calcium Phosphate Dibasic, Anhydrous (7757-93-9) |
|-----------|-----------|-----------------|
| DNEL       | DNEL      | 4.07 mg/m³ (Long-term - systemic effects, inhalation, workers) |
| PNEC       | PNEC      | 50 mg/l (Sewage treatment plant) |

8.2. Exposure controls

| Proper engineering controls: Ensure good ventilation of the work station. Extraction to remove dust at its source. |

Materials for protective clothing:

- GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available.

Hand protection:

- Gloves.

Eye protection:


Skin and body protection:

- Protective 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>Crystalline solid. Crystalline powder.</td>
</tr>
</tbody>
</table>
Calcium Phosphate Dibasic, Anhydrous
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Off-white</td>
</tr>
<tr>
<td>Odor</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.8 (1 %)</td>
</tr>
<tr>
<td>pH solution</td>
<td>1 %</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; 450 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Critical pressure</td>
<td>0 hPa</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</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>Not applicable</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>Specific gravity / density</td>
<td>2890 kg/m³</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>136.06 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water. Substance sinks in water. Soluble in hydrogenchloride. Soluble in nitric acid. Water: 0.010 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>350 °C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

9.2. Other information

VOC content: Not applicable
Other properties: Hygroscopic.

SECTION 10: Stability and reactivity

10.1. Reactivity
Decomposes on exposure to temperature rise: release of toxic/corrosive/combustible gases/vapours (phosphine). On burning: release of toxic and corrosive gases/vapours (phosphorus oxides). Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Reacts violently with (some) acids.

10.2. Chemical stability
Hygroscopic.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

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

10.5. Incompatible materials
No additional information available.

10.6. Hazardous decomposition products
No additional information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Calcium Phosphate Dibasic, Anhydrous
Safety Data Sheet

Acute toxicity: Not classified
(Based on available data, the classification criteria are not met)

Skin corrosion/irritation: Not classified
(Based on available data, the classification criteria are not met)

Serious eye damage/irritation: Not classified
(Based on available data, the classification criteria are not met)

Respiratory or skin sensitization: Not classified
(Lack of data)

Germ cell mutagenicity: Not classified
(Based on available data, the classification criteria are not met)

Carcinogenicity: Not classified
(Lack of data)

Reproductive toxicity: Not classified
(Based on available data, the classification criteria are not met)

Specific target organ toxicity (single exposure): Not classified
(Lack of data)

Specific target organ toxicity (repeated exposure): Not classified
(Based on available data, the classification criteria are not met)

Aspiration hazard: Not classified
(Based on available data, the classification criteria are not met)


Symptoms/injuries after skin contact: No data available.

Symptoms/injuries after eye contact: Slight irritation.

Symptoms/injuries after ingestion: No data available.

Chronic symptoms: No effects known.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: Not classified as dangerous for the environment according to the criteria of Directive 67/548/EEC. Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

Ecology - air: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water: Mild water pollutant (surface water). May cause eutrophication. No data available on ecotoxicity.

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 disposal recommendations: Remove waste in accordance with local and/or national regulations. Recycle/reuse, Precipitate/make insoluble. Remove to an authorized dump. Do not discharge into surface water.

Additional information: LWCA (the Netherlands): KGA category 05. Can be considered as non hazardous waste according to Directive 2008/98/EC.
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 Phosphate Dibasic, Anhydrous (7757-93-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
CANADA
Calcium Phosphate Dibasic, Anhydrous (7757-93-9)
Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations
Calcium Phosphate Dibasic, Anhydrous (7757-93-9)
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 Phosphate Dibasic, Anhydrous (7757-93-9)
Listed on the AICS (the Australian Inventory of Chemical Substances)
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on KECI (Chemical Inventory of Korea)
Listed on INSQ (Mexican national Inventory of Chemical Substances)
Listed on New Zealand - Inventory of Chemicals (NZIoC)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)

15.3. US State regulations

SECTION 16: Other information

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 : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.
<table>
<thead>
<tr>
<th>HMIS III Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1 Slight Hazard - Irritation or minor reversible injury possible</td>
</tr>
<tr>
<td>Flammability</td>
<td>0 Minimal Hazard - Materials that will not burn</td>
</tr>
<tr>
<td>Physical</td>
<td>1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.</td>
</tr>
</tbody>
</table>

**Personal Protection**

| E                     | Safety glasses, Gloves, Dust respirator |

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.