## SECTION 1: Identification

### 1.1. Identification

<table>
<thead>
<tr>
<th>Product form</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance name</td>
<td>Calcium Phosphate Monobasic Anhydrous</td>
</tr>
<tr>
<td>CAS No</td>
<td>7758-23-8</td>
</tr>
<tr>
<td>Product code</td>
<td>2160</td>
</tr>
<tr>
<td>Formula</td>
<td>Ca(H2PO4)2</td>
</tr>
<tr>
<td>Synonyms</td>
<td>acid calcium phosphate / AJAX (=calcium dihydrogen phosphate) / calcium bis(dihydrogenorthophosphate) / calcium bis(dihydrogenphosphate) / calcium bisphosphate / calcium diorthophosphate / calcium phosphate,monobasic / calcium superphosphate / calcium tetrahydrogen diorthophosphate / monocalcium orthophosphate / monocalciumphosphate / phosphoric acid, calcium salt / primary-calciumorthophosphate / prim-calciumphosphate</td>
</tr>
<tr>
<td>BIG no</td>
<td>28479</td>
</tr>
</tbody>
</table>

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

Use of the substance/mixture: Food industry: additive
Pharmaceuticals

### 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
justin.kuehnel@jostchemical.com - www.jostchemical.com

### 1.4. Emergency telephone number

Emergency number: CHEMTREC 800-424-9300

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

**GHS-US classification**

- Eye Dam. 1

  H318 - Causes serious eye damage

Full text of H-phrases: see section 16

### 2.2. Label elements

**GHS-US labeling**

<table>
<thead>
<tr>
<th>Hazard pictograms (GHS-US)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signal word (GHS-US)</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements (GHS-US)</td>
<td>H318 - Causes serious eye damage</td>
</tr>
<tr>
<td>Precautionary statements (GHS-US)</td>
<td>P280 - Wear eye protection P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a doctor</td>
</tr>
</tbody>
</table>

### 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 |
Calcium Phosphate Monobasic Anhydrous
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Phosphate Monobasic Anhydrous</td>
<td>(CAS No) 7758-23-8</td>
<td>100</td>
<td>Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

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 the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact: Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

First-aid measures after eye contact: Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist.


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

Symptoms/injuries after inhalation: AFTER INHALATION OF DUST: Slight irritation. EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

Symptoms/injuries after skin contact: Slight irritation.

Symptoms/injuries after eye contact: Corrosion of the eye tissue. Inflammation/damage of the eye tissue.


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

Suitable extinguishing media: Adapt extinguishing media to the environment.

Unsuitable extinguishing media: No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Non combustible.

Explosion hazard: No available data.


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


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”.

Emergency procedures: Avoid contact with skin and eyes. Do not breathe dust.

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. On heating: dilute combustible/toxic gases/vapours. Take account of toxic/corrosive precipitation water.

Methods for cleaning up: 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 13.

SECTION 7: Handling and storage

7.1.  Precautions for safe handling

Precautions for safe handling: Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

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: Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

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

Heat-ignition: heat sources.

Prohibitions on mixed storage: oxidizing agents. (strong) acids. (strong) bases. water/moisture.

Storage area: Store in a dry area. Meet the legal requirements.

Packaging materials: SUITABLE MATERIAL: polyethylene. MATERIAL TO AVOID: aluminium.

SECTION 8: Exposure controls/personal protection

8.1.  Control parameters

<table>
<thead>
<tr>
<th>Calcium Phosphate Monobasic Anhydrous (7758-23-8)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>DNEL</td>
</tr>
<tr>
<td>PNEC</td>
<td>PNEC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calcium Phosphate Monobasic Anhydrous (7758-23-8)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td>DNEL</td>
<td>DNEL</td>
</tr>
<tr>
<td>PNEC</td>
<td>PNEC</td>
</tr>
</tbody>
</table>

8.2.  Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station. Extraction to remove dust at its source. Eye fountain.
**Calcium Phosphate Monobasic Anhydrous**

**Safety Data Sheet**
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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**Personal protective equipment**

**Materials for protective clothing**
- Wear suitable protective clothing, gloves and eye/face protection.

**Hand protection**
- Gloves.

**Eye protection**
- Safety glasses. In case of dust production: protective goggles.

**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. Grains.</td>
</tr>
<tr>
<td>Color</td>
<td>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>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</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>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>2.20 (16 °C)</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>234.06 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Moderately soluble in water. Substance sinks in water. Soluble in acetic acid. Soluble in nitric acid. Soluble in hydrogenchloride. Water: 1.8 g/100ml (30 °C)</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>203 °C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**9.2. Other information**
- VOC content: Not applicable
- Other properties: Hygroscopic. Substance has acid reaction.

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### 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/bases.

#### 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
Direct sunlight. Moisture.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
On heating/burning: release of toxic and corrosive gases/vapors phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

**Calcium Phosphate Monobasic Anhydrous (7758-23-8)**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>17500 mg/kg (Rat; Literature)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg (Rabbit; Literature)</td>
</tr>
</tbody>
</table>

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

Serious eye damage/irritation : Causes serious eye damage.
(Based on available data, the classification criteria are not met)

Respiratory or skin sensitization : Not classified
(Based on available data, the classification criteria are not met)

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

Carcinogenicity : Not classified

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 inhalation : AFTER INHALATION OF DUST: Slight irritation. EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

Symptoms/injuries after skin contact : Slight irritation.

Symptoms/injuries after eye contact : Corrosion of the eye tissue. Inflammation/damage of the eye tissue.


Chronic symptoms : No effects known.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.


**Calcium Phosphate Monobasic Anhydrous (7758-23-8)**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOEC (acute)</td>
<td>&gt; 100 mg/l (96 hr; Onchorhyncus mykiss) (OECD 203 method) (results obtained by read-across)</td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Calcium Phosphate Monobasic Anhydrous (7758-23-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
</tr>
<tr>
<td>ThOD</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Calcium Phosphate Monobasic Anhydrous (7758-23-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential</td>
</tr>
</tbody>
</table>

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              | Remove waste in accordance with local and/or national regulations. |

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

TDG

| TDG Proper Shipping Name                      | Not regulated for transport |

Transport by sea

| Proper Shipping Name (IMDG)                    | Not regulated for transport |

Air transport

| Proper Shipping Name (IATA)                    | Not regulated for transport |

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Calcium Phosphate Monobasic Anhydrous (7758-23-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

<table>
<thead>
<tr>
<th>Calcium Phosphate Monobasic Anhydrous (7758-23-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calcium Phosphate Monobasic Anhydrous (7758-23-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

EU-Regulations

No additional information available
Calcium Phosphate Monobasic Anhydrous

National regulations

<table>
<thead>
<tr>
<th>Calcium Phosphate Monobasic Anhydrous (7758-23-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
</tr>
<tr>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</td>
</tr>
<tr>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
</tr>
<tr>
<td>Listed on INISQ (Mexican national Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
</tr>
<tr>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
</tr>
</tbody>
</table>

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Indication of changes : This sheet was updated (refer to the date at the top of this page).
Revision date : 10/03/2015

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Eye Dam. 1</th>
<th>Serious eye damage/eye irritation Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
</tbody>
</table>

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was 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>3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given</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>
</tbody>
</table>

SDS US (GHS HazCom 2012)

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.