Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name: Dicalcium Phosphate Anhydrous EC
Synonyms: Calcium Acid Phosphate; Calcium Hydorogen Orthophosphate; Calcium Hydrogen Phosphate; Calcium monohydrogen phosphate; Calcium salt (1:1); Dibasic calcium phosphate, dihydrate; Phosphoric acid
CAS Number: 7757-93-9
SDS Number/Grade: 8b
EC Number: 231-826-1
REACH Registration Number: 05-02118796980-22-0000

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

Relevant identified use(s): Dentifrice - As a polishing agent; Pharmaceutical - In the manufacture of pharmaceutical tablets and as a source of calcium and phosphorus in nutritional supplements; Food - Fortification of cereals and other processed foods

1.3 Details of the supplier of the safety data sheet

Manufacturer: Innophos
259 Prospect Plains Rd. Bldg A
Cranbury, NJ 08512-3706
United States
Telephone (Technical): 609-495-2495
Responsible Party - EU: LSR Associates Ltd
Woolley Road
Alconbury, Cambridgeshire PE28 4HS
United Kingdom
Telephone (General): +44 (0) 1954 212132

1.4 Emergency telephone number

Manufacturer: 800-424-9300 - Chemtrec - within USA and Canada
Manufacturer: +1 703-527-3887 - Chemtrec - outside USA and Canada (collect calls accepted)
Manufacturer: 615-386-7816 - Innophos Emergency Communication Team (ECT)

Section 2: Hazards Identification

EU/EEC

According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)
2.1 Classification of the substance or mixture
   CLP  •  Not classified
   DSD/DPD  •  Not classified

2.2 Label Elements
   CLP
      Hazard statements  •  No label element(s) required.
   DSD/DPD
      Risk phrases  •  No label element(s) required.

2.3 Other Hazards
   CLP  •  According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.
   DSD/DPD  •  This product is not considered dangerous under the European Directive 67/548/EEC

United States (US)
According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture
   OSHA HCS 2012  •  Not classified

2.2 Label elements
   OSHA HCS 2012
      Hazard statements  •  No label element(s) required.

2.3 Other hazards
   OSHA HCS 2012  •  This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Canada
According to WHMIS

2.1 Classification of the substance or mixture
   WHMIS  •  Not classified

2.2 Label elements
   WHMIS  •  No label element(s) required.

2.3 Other hazards
   WHMIS  •  In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS)

Section 3 - Composition/Information on Ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicalcium Phosphate Anhydrous ECD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

Section 4 - First Aid Measures

4.1 Description of first aid measures

**Inhalation**
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

**Skin**
- IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If irritation develops and persists, get medical attention.

**Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 15 minutes. Get medical attention if symptoms occur.

**Ingestion**
- Do NOT induce vomiting. No harmful affects are expected. Rinse mouth. Do not give anything by mouth to an unconscious person. If appreciable quantities are swallowed, call a physician or poison control center. Do not leave victim unattended.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

**Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

**Suitable Extinguishing Media**
- Not combustible. Use extinguishing media suitable for surrounding fire.

**Unsuitable Extinguishing Media**
- None known.

5.2 Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards**
- Non-combustible.

**Hazardous Combustion Products**
- None known.

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters’ protective clothing will only provide limited protection.
- LARGE FIRES: Move containers from fire area if you can do it without risk.
- LARGE FIRES: Do not scatter spilled material with high pressure water streams.
- LARGE FIRES: Dike fire-control water for later disposal.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal Precautions

- Do not touch or walk through spilled material.

Emergency Procedures

- Keep unauthorized personnel away.

6.2 Environmental precautions

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Avoid generating dust.
  SMALL DRY SPILLS: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
  Do not return material to its original container.
  LARGE SPILLS: Cover powder spill with plastic sheet or tarp to minimize spreading. Clean up residual material by washing area with water and detergent. Collect washings for disposal.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Avoid breathing dust. Do not use in areas without adequate ventilation. This is a food ingredient intended for human consumption. Keep containers closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in tightly closed containers. Store in an area that is sanitary and isolated from all toxic and harmful substances. Keep in a cool place. Avoid contamination of storage containers.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

8.2 Exposure controls

Engineering Measures/Controls

- Dilution ventilation. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Respiratory

- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear eye protection.

Hands

- Wear appropriate gloves.

Skin/Body

- Wear long sleeves and/or protective coveralls.

General Industrial Hygiene Considerations

- Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

Key to abbreviations

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)
## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Solid</td>
<td>White crystalline powder or triclinic crystals with no odor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Color</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White</td>
<td>Odorless</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odor Threshold</th>
<th>Data lacking</th>
</tr>
</thead>
</table>

**General Properties**

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition Temperature</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>2.89 Water=1</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Oxidizing Properties:</td>
<td>Not an Oxidizer.</td>
</tr>
</tbody>
</table>

**Vapor Pressure**

<table>
<thead>
<tr>
<th>Vapor Pressure</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporation Rate</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

**Flammability**

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEL</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Flammable.</td>
</tr>
</tbody>
</table>

**Environmental**

| Octanol/Water Partition coefficient | Data lacking |

### 9.2 Other Information

- No additional physical and chemical parameters noted.

---

### Section 10: Stability and Reactivity

#### 10.1 Reactivity

- No data available

#### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

#### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

#### 10.4 Conditions to avoid

- None known.

#### 10.5 Incompatible materials

- None known.

#### 10.6 Hazardous decomposition products

- None known.
# Section 11 - Toxicological Information

## 11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>CAS</th>
<th>Acute Toxicity: Ingestion/Oral-Rat LD50 • &gt;10000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicalcium Phosphate Anhydrous EC</td>
<td>7757-93-9</td>
</tr>
</tbody>
</table>

### GHS Properties

<table>
<thead>
<tr>
<th>Classification</th>
<th>Acute toxicity</th>
<th>Aspiration Hazard</th>
<th>Carcinogenicity</th>
<th>Germ Cell Mutagenicity</th>
<th>Skin corrosion/Irritation</th>
<th>Skin sensitization</th>
<th>STOT-RE</th>
<th>STOT-SE</th>
<th>Toxicity for Reproduction</th>
<th>Respiratory sensitization</th>
<th>Serious eye damage/Irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU/CLP</td>
<td>Data lacking</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
<td>EU/CLP</td>
</tr>
<tr>
<td>OSHA HCS 2012</td>
<td>Not relevant</td>
<td>Not relevant</td>
<td>Classification criteria not met</td>
<td>Classification criteria not met</td>
<td>Inconclusive data</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td>Data lacking</td>
<td>Classification criteria not met</td>
<td>Data lacking</td>
<td>Inconclusive data</td>
</tr>
</tbody>
</table>

### Route(s) of entry/exposure

- Inhalation, Skin, Eye, Ingestion
- Skin/Dermal Disorders of the lungs.

### Medical Conditions Aggravated by Exposure

### Potential Health Effects

#### Inhalation

- **Acute (Immediate)**
  - Exposure to dust may cause irritation. Nuisance dust may affect the lungs but reactions are typically reversible.

- **Chronic (Delayed)**
  - No data available.

#### Skin

- **Acute (Immediate)**
  - Exposure to dust may cause mechanical irritation.

- **Chronic (Delayed)**
  - No data available.

#### Eye

- **Acute (Immediate)**
  - Exposure to dust may cause mechanical irritation.
Ingestion

Acute (Immediate)

- This substance is commonly used as a component in food, vitamins and pharmaceutical tablets, and may be safely consumed in moderate amounts. Ingestion of large quantities may cause nausea, vomiting, diarrhea, abdominal cramps.

Chronic (Delayed)

- No data available.

Key to abbreviations

LD = Lethal Dose

Section 12 - Ecological Information

12.1 Toxicity

- No data found for product.

12.2 Persistence and degradability

- No data found for product.

12.3 Bioaccumulative potential

- No data found for product.

12.4 Mobility in Soil

- No data found for product.

12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects

Ecological Fate

- No data found for product.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>14.2 UN proper shipping name</th>
<th>14.3 Transport hazard class(es)</th>
<th>14.4 Packing group</th>
<th>14.5 Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>NDA</td>
<td>Not regulated</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>TDG</td>
<td>NDA</td>
<td>Not regulated</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>NDA</td>
<td>Not regulated</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>NDA</td>
<td>Not regulated</td>
<td>NDA</td>
<td>NDA</td>
</tr>
</tbody>
</table>

14.6 Special precautions for user

- None known.

14.7 Transport in bulk

- Not relevant.
Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications  ● None

Canada

<table>
<thead>
<tr>
<th>Labor</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada - WHMIS - Classifications of Substances</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Canada - WHMIS - Ingredient Disclosure List</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada - CEPA - Priority Substances List</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

Germany

<table>
<thead>
<tr>
<th>Environment</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany - TA Luft - Types and Classes</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Germany - Water Classification (VwVwS) - Annex 1</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Germany - Water Classification (VwVwS) - Annex 3</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

Philippines

<table>
<thead>
<tr>
<th>Other</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines - Priority Chemical List</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

Singapore

<table>
<thead>
<tr>
<th>Other</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore - Corrosive and Explosive Substances - Corrosive Substances</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

United States

<table>
<thead>
<tr>
<th>Labor</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals</td>
<td>Dicalcium Phosphate, Anhydrous</td>
<td>7757-93-9</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>
U.S. - OSHA - Specifically Regulated Chemicals
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

Environment
U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - CAA (Clean Air Act) - Class II Ozone Depleters
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

United States - California
Environment
U.S. - California - Proposition 65 - Carcinogens List
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male
• Dicalcium Phosphate, Anhydrous 7757-93-9 Not Listed

15.2 Chemical Safety Assessment
• No Chemical Safety Assessment has been carried out.

Section 16 - Other Information
Disclaimer/Statement of Liability

The information herein is given in good faith but no warranty, expressed or implied, is made.

Key to abbreviations

NDA = No Data Available