



Health	1
Fire	0
Reactivity	0
Special Hazards	

## Safety Data Sheet

### *Ca<sup>++</sup> Pure-HA Hydroxyapatite*

Section 1: Substance Composition and Source Information	
<b>Product Name:</b> Ca <sup>++</sup> Pure-HA Hydroxyapatite <b>CAS#:</b> 1306-06-5 <b>EC# (EINECS):</b> 215-145-7 <b>Chemical Name:</b> CALCIUM HYDROXYLAPATITE <b>Synonym:</b> Hydroxylapatite, calcium Hydroxylapatite, Tricalcium Phosphate, Calcium Phosphate Tribasic <b>Chemical Formula:</b> Ca <sub>10</sub> (PO <sub>4</sub> ) <sub>6</sub> (OH) <sub>2</sub> <b>Description:</b> Powder	<b>Contact Information:</b> Tosoh Bioscience LLC 3604 Horizon Drive, Suite 100 King of Prussia, PA 19406 USA Phone: 484-805-1219 FAX: 610-272-3028 Emergency Phone: CHEMTREC: 800-424-9300

Section 2: Hazards Identification
<p><b>Health Hazard:</b> No significant target effects reported for calcium hydroxylapatite. May cause irritation upon short-term exposure to the eyes and respiratory tract when inhaled.</p> <p><b>Emergency Overview:</b> Odorless white power. Chemically stable, inert nuisance dust. Incombustible. May cause eye or respiratory tract irritation.</p> <p><b>Inhalation:</b> Temporary irritation to mucous membranes may result from excessive exposure.</p> <p><b>Eye Contact:</b> Inert foreign body hazard only.</p> <p><b>Skin Contact:</b> may have a drying affect on the skin.</p> <p><b>Ingestion:</b> this material is unlikely to be hazardous by ingestion.</p> <p><b>Listed as a Carcinogen/Potential Carcinogen:</b></p> <ul style="list-style-type: none"> <li>• In the National Toxicology Program (NTP) Report on Carcinogens.....No</li> <li>• In the International Agency for Research on Cancer (IARC) Monographs.....No</li> <li>• By the Occupational Safety and Health Administration (OSHA).....No</li> </ul>

Section 3: First Aid Measures
<p><b>Eye Contact:</b> Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get Medical attention.</p> <p><b>Skin Contact:</b> Remove contaminated clothing and shoes. Wash skin with soap and water for 15 minutes. Get medical attention.</p> <p><b>Inhalation:</b> If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.</p> <p><b>Ingestion:</b> In case of excessive ingestion, obtain immediate medical assistance.</p>

Section 4: Fire and Explosion Data
<p><b>Flammability of the Product:</b> Incombustible</p> <p><b>Flammable Limits LEL/UEL %:</b> N/A</p> <p><b>Extinguishing Media:</b> None required. Use media required for other Substances in the area.</p> <p><b>Usual Fire and Explosion Hazards:</b> None</p> <p style="text-align: right;"><b>Flash Point (Close Cup):</b> Incombustible  <b>Special Fire Fighting Procedures:</b> None required</p>

Section 5: Accidental Release Measures
<p><b>Small Spill:</b> Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p> <p><b>Large Spill:</b> Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</p>

Section 6: Handling and Storage
<p><b>Precautions:</b> Avoid contact with eyes. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible.</p> <p><b>Storage:</b> Store and handle in accordance with all current regulation s and standards. Keep container tightly closed under normal laboratory conditions of temperature and humidity.</p>

Section 7: Exposure Control/Personal Protection
<p><b>Hazard Limits:</b> No occupational limits established.</p> <p><b>Personal Protection:</b> For conditions of frequent use or heavy exposure, respirator protection may be needed. Wear splash/safety goggles, lab coat, and gloves.</p>

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**Section 8: Physical and Chemical Properties**

<b>Physical State and Appearance:</b> Powdered solid	<b>Odor:</b> None
<b>Molecular Weight:</b> 1004.96	<b>Color:</b> White to off-white
<b>Volatility:</b> None	<b>Melting point:</b> 1760°C
<b>Water Solubility:</b> Insoluble	<b>Ca/P Ratio:</b> 1.664
<b>Solubility:</b> Soluble in acid solutions. Insoluble in organic solvents and in buffer solutions with a pH of 5 to 10	

**Section 9: Stability and Reactivity Data**

**Stable:** Inert to most chemical and reagents. Stable under normal conditions.  
**Hazardous Polymerization:** Will not occur.  
**Condition to Avoid:** None  
**Incompatibility:** Incompatible with acids  
**Hazardous decomposition Product:** Fumes of metal oxides and mica particles

**Section 10: Toxicological Information**

**Routes of Entry:** Inhalation. Ingestion  
**Toxicity to Animals:** LD50: Not Available, LC50: Not Available  
**Chronic Effects on Humans:**

- **MUTAGENIC EFFECTS:** Classified NONE for humans
- **DEVELOPMENTAL TOXICITY:** Classified Reproduction system/toxin/female, Reproductive system/toxin/mal, Development toxin [none].

**Other toxic Effects on Human:** Hazardous in case of inhalation. Slightly hazardous in case of skin contact (irritation), of ingestion.  
**Special Remarks on Toxicity to Animals:** Not Available  
**Special Remarks on Chronic Effects on Humans:** Not Available  
**Special Remarks on Other Toxic Effect on Humans (Acute Potential Health Effects):**

- Skin: it is unlikely to cause skin irritation or injury
- Eyes: may cause eye irritation
- Inhalation: this material is a dust or may product dust. It may cause respiratory tract irritation. Breathing small amounts of this material during normal industry handling is not likely to be harmful.
- Ingestion: Swallowing small amounts of this material during normal industry handling is not likely to be harmful.

**Section 11: Ecological Information**

**Environmental Fate:** No information found      **Environmental Toxicity:** No information found

**Section 12: Disposal Considerations**

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 13: Transport Information**

**DOT Classification:** Not a DOT controlled material (USA)      **Special Provisions for Transport:** N/A  
**Identification:** N/A

**Section 14: Other Regulatory Information**

**Federal and State Regulations:** No product were found  
**Other Regulations:** Not available  
**WHMIS (Canada):** Not controlled under WHMIS (Canada)  
**DSCL (EEC):** R36 – irritating to eyes, S2 – Keep out of reach of children, S46 – If swallowed, seek medical attention immediately and show container or label.  
**HMIS (USA):** Health Hazard: 1, Fire Hazard: 0, Reactivity: 0

**Section 15: Other Information**

**Other Special Considerations:** None  
**Revised:** 07/25/18

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