



Material Safety Data Sheet
Calcium Phosphate Tribasic

MSDS# 45339

Section 1 - Chemical Product and Company Identification

MSDS Name: Calcium Phosphate Tribasic
Catalog Numbers: C127-500, C133-212, C133-500
Synonyms: Tricalcium phosphate; Calcium phosphate $\text{Ca}_3(\text{PO}_4)_2$; Calcium phosphate, tribasic; Tricalcium orthophosphate.

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases:

CAS#: 7758-87-4
Chemical Name: Phosphoric acid, calcium salt (2:3)
%: 100
EINECS#: 231-840-8
Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! May cause eye, skin, and respiratory tract irritation. Target Organs: No data found.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation. The toxicological properties of this material have not been fully investigated.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.
Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.
Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Get medical aid. Immediately flush eyes with plenty of water for at least 15 minutes.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to

Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 1; flammability: 0; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Reduce airborne dust and prevent scattering by moistening with water. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Hydroxylapatite Ca ₅ (OH)(PO ₄) ₃	none listed	none listed	none listed
Phosphoric acid, calcium salt (2:3)	none listed	none listed	none listed
Calcium hydroxide phosphate (Ca ₅ (OH)(PO ₄) ₃)	none listed	none listed	none listed

OSHA Vacated PELs: Hydroxylapatite Ca₅(OH)(PO₄)₃: None listed Phosphoric acid, calcium salt (2:3): None listed Calcium hydroxide phosphate (Ca₅(OH)(PO₄)₃): None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: 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 if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: white
Odor: odorless
pH: Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: 1670 deg C (3,038.00°F)
Decomposition Temperature: Not available

Solubility in water: Insoluble
Specific Gravity/Density: 3.14
Molecular Formula: Ca10O25P6.H2O
Molecular Weight: 1004.7

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Dust generation, excess heat.
Incompatibilities with Other Materials: No information found..
Hazardous Decomposition Products: Phosphine, oxides of phosphorus, oxides of phosphorus, calcium oxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 1306-06-5: MY8434000
CAS# 7758-87-4: None listed
CAS# 12167-74-7: None listed

RTECS:

CAS# 1306-06-5: Oral, mouse: LD50 = >99500 mg/kg;
Oral, rat: LD50 = >25350 mg/kg;

LD50/LC50:

RTECS:

CAS# 7758-87-4:

RTECS:

CAS# 12167-74-7:

Carcinogenicity: Hydroxylapatite Ca5(OH)(PO4)3 - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Phosphoric acid, calcium salt (2:3) - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Calcium hydroxide phosphate (Ca5(OH)(PO4)3) - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 1306-06-5: 0

CAS# 7758-87-4: 0

CAS# 12167-74-7: 0

Canada

CAS# 1306-06-5 is listed on Canada's DSL List

CAS# 7758-87-4 is listed on Canada's DSL List

CAS# 12167-74-7 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not controlled.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 1306-06-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7758-87-4 is not listed on Canada's Ingredient Disclosure List.

CAS# 12167-74-7 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 1306-06-5 is listed on the TSCA Inventory.

CAS# 7758-87-4 is listed on the TSCA Inventory.

CAS# 12167-74-7 is not listed on the TSCA Inventory. It is for research and development use only.

REVIEWED

Section 16 - Other Information

MSDS Creation Date: 9/02/1997

Revision #8 Date 7/20/2009

DATE: July 31/2012
CRutledge

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
