



MSDS - Monocalcium Phosphate 21%

Issue Date: May 5, 2009

Section 1. Product Information

Chemical Name or Synonym: Calcium Phosphate, Monobasic, Monohydrate

Product Use: Food

Product Status: FDA regulated use only

Molecular Formula: $\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot \text{H}_2\text{O}$

Distributed by Pestell Minerals & Ingredients, New Hamburg, ON Canada

24 Hour Emergency Telephone (Canutec): 613-996-6666

Section 2. Hazards Ingredients

Monocalcium Phosphate Monohydrate 75%

CAS #7758-23-8

Dicalcium Phosphate Dihydrate 19%

Magnesium, iron, aluminum phosphates and sulfates 4%

Section 3. Physical Data

Physical Appearance and Odor: Odorless gray granular solid

Melting Point: Loses water at 228°F

Viscosity: Not Applicable

Solubility in Water: 1.80%

Boiling Point: Not Applicable

Specific Gravity: ($\text{H}_2\text{O}=1$): 2.2

Molecular Weight: Not Applicable

Bulk Density Loose: 57 to 60 lbs/ft³

% Volatiles: Not Applicable

pH: 2.8 (10% slurry)

Evaporation Rate: Not Applicable

Section 4. Fire Fighting Measures

Flash Point: Not Applicable

Autoignition Temperature: Not Applicable

Lower Explosive Limit: Not Applicable Upper Explosive Limit: Not Applicable

Unusual Fire and Explosion Hazards: Use any extinguishing media required for surrounding fire.

Dicalcium phosphate is a non-flammable inorganic salt. It may release small amounts of toxic and/or irritating phosphorous oxides when heated to high temperatures as in a fire.

Extinguishing Media: Not Applicable

Special Fire Fighting Procedures and Equipment: Firefighters and emergency personnel should wear full protective clothing and self-contained breathing apparatus.

Section 5. Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid: High temperatures may cause release of phosphorus oxides

Materials to Avoid: None known

Hazardous Decomposition Products: Phosphorous oxides at very high temperatures.

Section 6. Toxicological Information

Significant Routes of Exposure: Skin or eye contact, inhalation (breathing), ingestion (swallowing),
Ingestion is unlikely.

Potential Acute Health Effects

Eyes and Skin: Dry material may cause slight irritation to the eyes, skin, nose and throat

Inhalation: May cause slight discomfort

Ingestion: No information was found concerning ingestion

Toxicity to Animals: Acute Oral Toxicity: LD50 (rat): 17,500 mg/kg

Special Remarks on Toxicity to Animals: None found

Other Effects on Humans: None found

Special Remarks on Chronic Effects on Humans: None found

Special Remarks on Other Effects on Humans: None found

Ecotoxicity: None

Environmental Fate: Monocalcium Phosphate has a solubility of less than 2% in water

Toxicity: Non toxic to aquatic organisms as defined by USEPA

Degradation Products: None

Section 7. Preventive Measures

Handling/Storage

Ventilation: Local exhaust or other ventilation that will reduce dust concentrations to less than the recommended Permissible Exposure Limit

Handling: Use appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid inhalation and ingestion.

Storage: Store in ventilated area away from fire hazards.

Exposure Controls/Personal Protection

Engineering Controls: Local exhaust or other ventilation that will reduce dust concentrations to less than the recommended Permissible Exposure Limit

Eye Protection: Tight fitting goggles should be worn in dusty areas to reduce dust exposure to the eyes.

Protective Clothing: If irritation occurs, long sleeves and impervious gloves should be worn.

Respiratory Protection: A NIOSH approved dust respirator should be used when exposure exceeds the OSHA nuisance dust standard of 15 mg/m³

Other Protective Clothing or Equipment: Optional

Accidental Release Measures

Small Spill: Monocalcium phosphate is used as a feed ingredient. If uncontaminated, recover and reuse product. If contaminated with other minerals, collect in suitable containers.

Large Spill: Monocalcium phosphate is used as a feed ingredient. Large spills, however, can kill vegetation. Prevent large quantities from contacting vegetation and waterways. If uncontaminated, recover and reuse product. If contaminated with other materials, collect in suitable containers.

Release Notes: If spill could potentially enter any waterway, including intermittent dry creeks, contact the local authorities.

Comments: Large and small spills may have a broad definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

Disposal Considerations

Depending on the type and extent of contamination, if any, special disposal methods may be required. Consult State or Federal environmental regulatory agencies for acceptable disposal procedures and locations.

Section 8. First Aid Measures

Skin: Wash thoroughly with soap and water

Ingestion: Do not induce vomiting. If conscious and large amount is ingested give several glasses of water to dilute stomach contents. Call a physician if a large amount of Monocalcium Phosphate is swallowed.

Inhalation: Remove to fresh air. Keep warm. Get medical attention if discomfort continues.

Section 9. Transportation Information

Not regulated by DOT

Disclaimer

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