
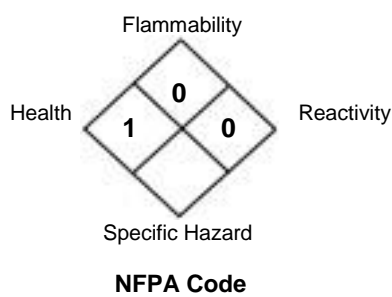


Material Safety Data Sheet

Revision Issued:	06/28/2012	Supersedes:	12/13/2011	First Issued:	11/30/1998
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Section I – Product and Company Identification

Product Name: Monocalcium Phosphate (21.0%P)		PotashCorp MSDS No.: 17 ERG No.: N/A	
	1101 Skokie Blvd., Northbrook, IL 60062 Phone (800) 241-6908 / (847) 849-4200		
	Suite 500, 122 – 1 st Avenue South Saskatoon, Saskatchewan Canada S7K7G3 Phone (800) 667-0403 from Canada (800) 667-3930 from USA		
	Emergencies (800) 424-9300 (CHEMTREC) Web Site www.potashcorp.com Health Emergencies, Contact Your Local Poison Center		
Common Name: Ortho Calcium Hydrogen Phosphate	Formula: Ca(H ₂ PO ₄) ₂ ·H ₂ O + CaHPO ₄ ·2H ₂ O	Synonym: MCP, Monocal, MCPC	Uses: Animal and Poultry Feeds

Section II – Composition / Information On Ingredients

Chemical Name	CAS No.	Exposure Limits								
		OSHA PEL		TLV – TWA		STEL		CEIL		% by Weight
		mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
Monocalcium phosphate monohydrate	7758-23-8	none						none		63.0
Dicalcium phosphate dihydrate	7757-93-9	none						none		15.8
Magnesium, iron, aluminum phosphates and sulfates										4
Moisture, residual										1.8
Fluoride, as F. max										0.21

The OSHA nuisance dust limit of 15 mg/m³ or the ACGIH nuisance dust limit of 10 mg/m³ for the eight hour time weighted averages applies.

Section III – Hazard Identification

Potential Acute Health Effects:	
Eyes and Skin:	Dry material may cause slight irritation to the eyes, skin, nose and throat.
Inhalation:	Respiratory tract irritation and coughing may develop.
Ingestion:	Irritation or burns of the oropharynx, esophagus or GI tract may occur.
Potential Chronic Health Effects:	No information is available
CARCINOGENICITY LISTS	IARC Monograph: No NTP: No OSHA: No

Section IV – First Aid Measures	
Eyes:	Flush thoroughly with water, including under the eyelids. Get medical attention if irritation continues.
Skin:	Wash thoroughly with soap and water.
Ingestion:	If swallowed, immediately dilute with 4 to 8 ounces of water or milk (not to exceed 4 ounces in a child)
Inhalation:	Remove to fresh air. Keep warm. Get medical attention if discomfort continues.

Section V – Fire Fighting Measures			
Flash Point:	Not Applicable	Auto Ignition 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 phosphorus oxides when heated to high temperatures as in a fire.		
Extinguishing Media:	Not Applicable		
Special Firefighting Procedures and Equipment:	Firefighters and emergency personnel should wear full protective clothing and self-contained breathing apparatus.		

Section VI – Accidental Release Measures	
Small Spill:	Monocalcium phosphate is used as a feed ingredient. If uncontaminated, recover and reuse product. If contaminated with other materials, 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. If in the U.S., contact the US COAST GUARD NATIONAL RESPONSE CENTER toll free number 800-424-8802. In case of accident or road spill notify: CHEMTREC IN USA at 800-424-9300; CANUTEC in Canada at 613-996-6666 CHEMTREC in other countries at(International code)+1-703-527-3887.
Comments:	See Section XIII for disposal information and Section XV for regulatory requirements. 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.

Section VII – Handling and 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 as specified in Section VIII. Avoid contact with skin and eyes. Avoid inhalation and ingestion.
Storage:	Store in ventilated area, away from fire hazards.

Section VIII – Exposure Controls/ Personal Protection	
Engineering Controls:	Local exhaust or other ventilation that will reduce dust concentrations to less than the recommended Permissible Exposure Limit
Personal Protection:	
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/m ³ .
Other Protective Clothing or Equipment:	Optional

Section IX – Physical and Chemical Properties

Appearance/Color/Odor:	Odorless gray granular solid	Boiling Point:	Not Applicable
Melting Point/Range:	109°C	Boiling Point Range:	Not Applicable
Solubility in Water:	18 g/0.1L @ 30°C (CAS 7758-23-8)	Vapor Pressure (mmHg):	Not Applicable
Specific Gravity:	2.22 g/mL @ 18°C	Molecular Weight:	234.05
Vapor Density:	Not Applicable	% Volatiles:	Not Applicable
Bulk Density:	57 to 60 lbs/ft ³	Evaporation Rate:	Not Applicable
pH:	2.8 (10% slurry)	Freezing Point:	Not Applicable
Viscosity:	Not Applicable	Density:	Not Applicable

Section X – Stability and Reactivity

Stability:	Stable
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	High temperatures may cause release of phosphorous oxides.
Materials to Avoid (Incompatibles):	None known.
Hazardous Decomposition Products:	Phosphorous oxides at very high temperatures.

Section XI – Toxicological Information

Significant Routes of Exposure:	Skin or eye contact, inhalation (breathing), ingestion (swallowing), Ingestion is unlikely.	
Toxicity to Animals:	Acute Oral Toxicity:	LD ₅₀ (rat): 17,500 mg/kg
	Acute Inhalation Toxicity:	No data available
	Acute Toxicity: Other Routes:	No data available
	Acute Dermal Toxicity:	No data available
	Repeated Dose Toxicity:	No data available
	Eye & Skin Irritation/Corrosion:	No data available
Special Remarks on Toxicity to Animals:	No data available	
Other Effects on Humans:	No data available	
Special Remarks on Chronic Effects on Humans	No data available	
Special Remarks on Other Effects on Humans:	No data available	

Section XII – Ecological Information

Ecotoxicity:	EPA Ecological Toxicity rating :	
	Acute Toxicity to Fish:	No data available
	Chronic Toxicity to Fish:	No data available
	Acute Toxicity to Aquatic Invertebrates:	No data available
	Toxicity to Aquatic Plants:	No data available
	Toxicity to Bacteria: (activated sludge):	No data available
	Toxicity to Soil Dwelling Organisms:	No data available
	Toxicity to Other Non-Mammalian Terrestrial Species:	No data available
	Toxicity to Terrestrial Plants:	No data available
Environmental Fate:	Stability in Water:	No data available
	Stability in Soil:	No data available
	Transport and Distribution:	No data available
Toxicity:	Non-toxic to aquatic organisms as defined by USEPA.	
Degradation Products:	Biodegradation:	No data available
	Photodegradation:	No data available

Section XIII – Disposal Considerations

Product Disposal:	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.
General Comments:	None

Section XIV – Transportation Information		
	USDOT	TDG - Canada
Proper Shipping Name:	Not regulated	Not regulated
Hazard Class:		
Identification Number:		
Packing Group (Technical Name):		
Labeling / Placarding:		
Authorized Packaging:		
Notes:		
European Transportation:		

Section XV – Regulatory Information										
UNITED STATES: SARA Hazard Category:	This product has been reviewed according to the EPA Hazard Categories promulgated under Section 311 and 312 of the Superfund Amendment and reauthorization Act of 1986 (SARA title III) and is considered, under applicable definitions, to meet the following categories:									
	Fire:	No	Pressure Generating:	No	Reactivity:	No	Acute:	Yes	Chronic:	No
	40 CFR Part 355 - Extremely Hazardous Substances:					None				
	40 CFR Part 370 - Hazardous Chemical Reporting:					None				
	All intentional ingredients listed on the TSCA inventory.									
SARA Title III Information:	This product contains the following substances subject of the reporting requirements of Title III (EPCRA) of the Superfund amendments and Reauthorization Act of 1986 and 40 CFR Part 372:									
	Chemical	CAS NO.	Percent by Weight	CERCLA RQ (lbs)*	SARA (1986) Reporting					
					311	312	313			
	Monocalcium phosphate monohydrate	7758-23-8	63.0	NA	no*	no*	no			
	Dicalcium phosphate dihydrate	7757-93-9	15.8	NA	no*	no*	no			
	Note * Exempt from reporting in accordance with 40CFR370.2(5)									
CERCLA/Superfund, 40 CFR Parts 117, 302:	If this product contains components subject to substances designated as CERCLA reportable Quantity (RQ) Substances, it will be designated in the above table with the RQ value in pounds. If there is a release of RQ Substance to the environment, notification to the National response Center, Washington D.C. (1-800-424-8802) is required.									
CANADA:	WHMIS Hazard Symbol and classification:				This product is not WHMIS controlled					
	Ingredient Disclosure List				This product does contain ingredient(s) on this list.					
	Environmental Protection:				All intentional ingredients are listed on the DSL (Domestic Substance List).					
EINECS#:	(Monocalcium phosphate monhydrate) 231-837-1 (Dicalcium phosphate dihydrate) 231-826-1									
California: Prop 65:	This is not a chemical known to cause cancer, nor is it listed.									

Section XVI – Other Information				
NFPA Hazard Ratings:	Health: 1	Fire: 0	Reactivity: 0	Special Hazards:
	0 = Insignificant	1 = Slight	2 = Moderate	3 = High 4 = Extreme
COMMENTS:	The HMIS ratings are the same as NFPA. This product is TSE/BSE (Transmissible Spongiform Encephalopathy/Bovine Spongiform Encephalopathy) free. There are no animal constituents used in the manufacture of Monocalcium Phosphate (21% P) for PCS Sales (USA) Inc. Our product is created through a chemical process.			
Section(s) changed since last revision:	I			
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