Material Safety Data Sheet

Revision Iss	ued: 02/10/1	0	Supe	rcedes:	12/31/06	First Issu	i ed: 11.	/30/98
Section I	- Product and C	Company I	dentification	1				
Product N	Product Name: Monocalcium Phosphate (21.0%P)					PotashCor	p MSDS No.:	
			-	•	- /		ERG No.:	N/A
		1101 Skokie	Blvd., Northbrook	, IL 60062				
		Phone (800) 2	241-6908 / (847)	849-4200		FI	ammability	
PCS Sales		Suite 500, 122 – 1 st Avenue South Saskatoon, Saskatchewan Canada S7K7G3 Phone (800) 667-0403 from Canada (800) 667-3930 from USA			Health 1 0 Reactivity		Reactivity	
ouloo		Emergencies	s (800) 424-9300	(CHEMTRE	EC)	Spe	cific Hazard	
		•	w.potashcorp.cor	•		N	PA Code	
		Health Emergencies, Contact Your Local Poison Center						
		-				1		
Common Name:	Calcium Phosphate Mobobasic Dihydrate	Formula:	Ca(H ₂ PO ₄) ₂ .H ₂ + CaHPO ₄ .2H ₂		nym: ^M	CP, Monocal, MCPC	Uses:	Animal and Poultry Feeds

Section II – Composition / Information On Ingredients

		Exposure Limits								
Chemical Name	CAS No.	OSHA	PEL	TLV –	TWA	ST	EL	С	EIL	% by
		mg/m ³	ppm	Weight						
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										0.15

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 Ident	Section III – Hazard Identification				
Potential Acute Health Effects:					
Eyes and Skin:	Dry material may cause slight irration 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	Section IV – First Aid Measures					
Eyes:	Flush thoroughly	with water, including under the eye	elids. Get medical attention if irritat	ion continues.		
Skin:	Wash thoroughly	with soap and water.				
Ingestion:	If swallowed, imn	nediately dilute with 4 to 8 ounces of	of water or milk (not to exceed 4 ou	inces in a child)		
Inhalation:	Remove to fresh	air. Keep warm. Get medical atte	ntion if discomfort continues.			
Section V	Section V – Fire Fighting Measures					
Flash Point:		Not Applicable	Auto ignition Temperature:	Not Applicable		
Lower Explos	ive Limit:	Not Applicable	Upper Explosive Limit:	Not Applicable		
Unusual Fire a Hazards:	Jnusual Fire and Explosion lazards: 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 heat 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 bre apparatus.			othing and self-contained breathing			

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

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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 a	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
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Significant Routes of Exposure:	Skin or eye contact, inhalation (breat	thing), ingestion (swallowing), Ingestion is unlikely.	
	Acute Oral Toxicity:	LD ₅₀ (rat): 17,500 mg/kg	
	Acute Inhalation Toxicity:	No data available	
Toxicity to Animals:	Acute Toxicity: Other Routes:	No data available	
Toxicity to Animais.	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

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	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		
Ecotoxicity:	Toxicity to Aquatic Plants:	No data available		
Lootoxicity.	Toxicity to Bacteria: (activated sludge):	No data available		
	Toxicity to Soil Dwelling Organisms:	No data available		
	Toxicity to Other Non-Mammalian	No data available		
	Terrestrial Species:			
	Toxicity to Terrestrial Plants:	No data available		
	Stability in Water:	No data available		
Environmental Fate:	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		
Degradation Floudets.	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 Hazard Class: Identification Number: Identification Number: Packing Group (Technical Name): Labeling / Placarding: Identification Authorized Packaging: Identification:

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					
			art 370 - Haz			None						
		All intentional ingredients listed on the TSCA inventory.										
SARA	SARA Title III Information: This product contains the following substances subject of the reporting requirements of Title III (EPCRA) the Superfund amendments and Reauthorization Act of 1986 and 40 CFR Part 372:						:A) of					
	Chemical		CAS NO.	Percent	-	ERCLA RQ	SARA (1986) Reporting					
	Onennear			by Weig	ht	(lbs)*	311		312	313	-	
	Monocalcium phosph 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 r	eporting 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 (F Substances, it will be designated in the above table with the RQ value in pounds. If there is a release of Substance to the environment, notification to the National response Center, Washington D.C. (1-800-424 8802) is required.							of RQ				
CANADA:								ct 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										
Cal	ifornia: Prop 65:	This is no	t a chemical k	nown to caus	e cance	r, nor is it listed	d.					

Section XVI – Other Information								
NFPA Hazard Ratings:	Health: 1	Fire: 0	Reactivity: 0	Spe	ecial Hazards:			
INTA nazaru Natings.	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 Monodicalcium Phosphate (21% P) for PCS Sales (USA) Inc. Our product is created through a chemical process.								
Section(s) changed since last revision:	II, III, IV, IX, XII, XV							
(EXPRESS OR IMPLIED) solely responsible for deter	OR ANY GUARANTEE OF rmining the suitability of us USE OF SUCH INFORMA	F ITS ACCURACY OF e in each particular si ATION, including with	R SUFFICIENCY and ituation. PCS Sales s out limitation any reco	is taken at th pecifically DIS				