
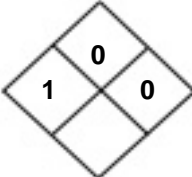


# Material Safety Data Sheet

Revision Issued: 3/9/07	Supercedes: 12/31/06	First Issued: 12/31/1989
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## Section I – Product and Company Identification

<b>Product Name:</b> Dicalcium Phosphate (18.5% P)	PotashCorp MSDS No.: 16 ERG No.: N/A
 <p>1101 Skokie Blvd., Northbrook, IL 60062 Phone (800) 241-6908 / (847) 849-4200</p> <p>Suite 500, 122 – 1<sup>st</sup> Avenue South Saskatoon, Saskatchewan Canada S7K7G3 Phone (800) 667-0403 from Canada (800) 667-3930 from USA</p> <p><b>Emergencies (800) 424-9300 (CHEMTREC)</b> Web Site <a href="http://www.potashcorp.com">www.potashcorp.com</a> Health Emergencies, Contact Your Local Poison Center</p>	<p>Flammability</p> <p>Health  Reactivity</p> <p>Specific Hazard</p> <p><b>NFPA Code</b></p>

<b>Common Name:</b>	Calcium Phosphate Dibasic Dihydrate	<b>Formula:</b>	CaHPO <sub>4</sub> ·2H <sub>2</sub> O+ Ca(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> ·H <sub>2</sub> O	<b>Synonym:</b>	DCP Dical	<b>Uses:</b>	Animal and Poultry Feeds
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## Section II – Composition / Information On Ingredients

Chemical Name	CAS No.	Exposure Limits								% by Weight
		OSHA PEL		TLV – TWA		STEL		CEIL		
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
Dicalcium phosphate dihydrate	7757-93-9	none		none		none		none		56
Monocalcium phosphate monohydrate	7758-23-8	none		none		none		none		38
Magnesium, iron, aluminum phosphates and sulfates										4
Moisture, noncombined										1.8
Fluoride, as F(max.)										0.20

The OSHA nuisance dust limit of 15 mg/m<sup>3</sup> or the ACGIH nuisance dust limit of 10 mg/m<sup>3</sup> for the eight hour time weighted averages applies.

## Section III – Hazard Identification

<b>Potential Acute Health Effects:</b>	
<b>Eyes and Skin:</b>	Dry material may cause slight irritation to the eyes, skin, nose and throat.
<b>Inhalation:</b>	May cause slight discomfort.
<b>Ingestion:</b>	No information was found concerning ingestion.
<b>Potential Chronic Health Effects:</b>	No other potential chronic health effects known.
<b>CARCINOGENICITY LISTS</b>	<b>IARC Monograph:</b> No <b>NTP:</b> No <b>OSHA:</b> No

<b>Section IV – First Aid Measures</b>	
<b>Eyes:</b>	Flush thoroughly with water, including under the eyelids. Get medical attention if irritation continues.
<b>Skin:</b>	Wash thoroughly with soap and water.
<b>Ingestion:</b>	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 Dicalcium Phosphate is swallowed.
<b>Inhalation:</b>	Remove to fresh air. Keep warm. Get medical attention if discomfort continues.

<b>Section V – Fire Fighting Measures</b>			
<b>Flash Point:</b>	Not Applicable	<b>Autoignition Temperature:</b>	Not Applicable
<b>Lower Explosive Limit:</b>	Not Applicable	<b>Upper Explosive Limit:</b>	Not Applicable
<b>Unusual Fire and Explosion Hazards:</b>	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.		
<b>Extinguishing Media:</b>	Not Applicable		
<b>Special Firefighting Procedures and Equipment:</b>	Firefighters and emergency personnel should wear full protective clothing and self-contained breathing apparatus.		

<b>Section VI – Accidental Release Measures</b>	
<b>Small Spill:</b>	Dicalcium phosphate is used as a feed ingredient. If uncontaminated, recover and reuse product. If contaminated with other materials, collect in suitable containers.
<b>Large Spill:</b>	Dicalcium phosphate is used as a feed ingredient. Prevent large quantities from contacting vegetation and waterways. If uncontaminated, recover and reuse product. If contaminated with other materials, collect in suitable containers.
<b>Release Notes:</b>	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.
<b>Comments:</b>	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.

<b>Section VII – Handling and Storage</b>	
<b>Ventilation:</b>	Local exhaust or other ventilation that will reduce dust concentrations to less than the recommended Permissible Exposure Limit
<b>Handling:</b>	Use appropriate personal protective equipment as specified in Section VIII. Avoid contact with skin and eyes. Avoid inhalation and ingestion.
<b>Storage:</b>	Store in ventilated area, away from fire hazards.

<b>Section VIII – Exposure Controls/ Personal Protection</b>	
<b>Engineering Controls:</b>	Local exhaust or other ventilation that will reduce dust concentrations to less than the recommended Permissible Exposure Limit
<b>Personal Protection:</b>	
<b>Eye Protection:</b>	Tight fitting goggles should be worn in dusty areas to reduce dust exposure to the eyes.
<b>Protective Clothing:</b>	If irritation occurs, long sleeves and impervious gloves should be worn.
<b>Respiratory Protection:</b>	A NIOSH-approved dust respirator should be used when exposure exceeds the OSHA nuisance dust standard of 15 mg/m <sup>3</sup> .
<b>Other Protective Clothing or Equipment:</b>	Optional

Section IX – Physical and Chemical Properties			
<b>Appearance/Color/Odor:</b>	Odorless light gray granular solid	<b>Boiling Point:</b>	Not Applicable
<b>Melting Point/Range:</b>	Loses water at 228° F	<b>Boiling Point Range:</b>	Not Applicable
<b>Solubility in Water:</b>	0.017%	<b>Vapor Pressure (mmHg):</b>	Not Applicable
<b>Specific Gravity:</b>	2.3	<b>Molecular Weight:</b>	Not Applicable
<b>Vapor Density:</b>	Not Applicable	<b>% Volatiles:</b>	Not Applicable
<b>Bulk Density:</b>	58 to 61 lbs/ft <sup>3</sup>	<b>Evaporation Rate:</b>	Not Applicable
<b>pH:</b>	3.4 (10% slurry)	<b>Freezing Point:</b>	Not Applicable
<b>Viscosity:</b>	Not Applicable	<b>Density:</b>	Not Applicable

Section X – Stability and Reactivity	
<b>Stability:</b>	Stable
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Conditions to Avoid:</b>	High temperatures may cause release of phosphorous oxides.
<b>Materials to Avoid (Incompatibles):</b>	None known.
<b>Hazardous Decomposition Products:</b>	Phosphorous oxides at very high temperatures.

Section XI – Toxicological Information		
<b>Significant Routes of Exposure:</b>	Skin or eye contact, inhalation (breathing), ingestion (swallowing). Ingestion is unlikely.	
<b>Toxicity to Animals:</b>	<b>Acute Oral Toxicity:</b>	No data available
	<b>Acute Inhalation Toxicity:</b>	No data available
	<b>Acute Toxicity: Other Routes:</b>	No data available
	<b>Acute Dermal Toxicity:</b>	No data available
	<b>Repeated Dose Toxicity:</b>	No data available
	<b>Eye &amp; Skin Irritation/Corrosion:</b>	No data available
<b>Special Remarks on Toxicity to Animals:</b>	No data available	
<b>Other Effects on Humans:</b>	No data available	
<b>Special Remarks on Chronic Effects on Humans:</b>	No data available	
<b>Special Remarks on Other Effects on Humans:</b>	No data available	

Section XII – Ecological Information		
<b>Ecotoxicity:</b>	<b>EPA Ecological Toxicity rating :</b>	
	<b>Acute Toxicity to Fish:</b>	No data available
	<b>Chronic Toxicity to Fish:</b>	No data available
	<b>Acute Toxicity to Aquatic Invertebrates:</b>	No data available
	<b>Toxicity to Aquatic Plants:</b>	No data available
	<b>Toxicity to Bacteria: (activated sludge):</b>	No data available
	<b>Toxicity to Soil Dwelling Organisms:</b>	No data available
	<b>Toxicity to Other Non-Mammalian Terrestrial Species:</b>	No data available
	<b>Toxicity to Terrestrial Plants:</b>	No data available
<b>Environmental Fate:</b>	<b>Stability in Water:</b>	Dicalcium Phosphate has a solubility of less than 0.02% in water.
	<b>Stability in Soil:</b>	No data available
	<b>Transport and Distribution:</b>	No data available
<b>Toxicity:</b>	Non-toxic to aquatic organisms as defined by USEPA.	
<b>Degradation Products:</b>	<b>Biodegradation:</b>	No data available
	<b>Photodegradation:</b>	No data available

Section XIII – Disposal Considerations	
<b>Product Disposal:</b>	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.
<b>General Comments:</b>	None

## Section XIV – Transportation Information

	<b>USDOT</b>	<b>TDG - Canada</b>
<b>Proper Shipping Name:</b>	Not regulated	Not regulated
<b>Hazard Class:</b>		
<b>Identification Number:</b>		
<b>Packing Group (Technical Name):</b>		
<b>Labeling / Placarding:</b>		
<b>Authorized Packaging:</b>		
<b>Notes:</b>		
<b>European Transportation:</b>		

## Section XV – Regulatory Information

<b>UNITED STATES: SARA Hazard Category:</b>	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:																																								
	<b>Fire:</b>	No	<b>Pressure Generating:</b>	No	<b>Reactivity:</b>	No	<b>Acute:</b>	Yes	<b>Chronic:</b>	No																															
	<b>40 CFR Part 355 - Extremely Hazardous Substances:</b>						None																																		
	<b>40 CFR Part 370 - Hazardous Chemical Reporting:</b>						None																																		
	<b>All intentional ingredients listed on the TSCA inventory.</b>																																								
<b>SARA Title III Information:</b>	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:																																								
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Chemical</th> <th rowspan="2">CAS NO.</th> <th rowspan="2">Percent by Weight</th> <th rowspan="2">CERCLA RQ (lbs)*</th> <th colspan="3">SARA (1986) Reporting</th> </tr> <tr> <th>311</th> <th>312</th> <th>313</th> </tr> </thead> <tbody> <tr> <td>Dicalcium phosphate dihydrate</td> <td>7757-93-9</td> <td>75</td> <td>NA</td> <td>no*</td> <td>no*</td> <td>no</td> </tr> <tr> <td>Monocalcium phosphate monohydrate</td> <td>7758-23-8</td> <td>19</td> <td>NA</td> <td>no*</td> <td>no*</td> <td>no</td> </tr> <tr> <td colspan="7">Note * Exempt from reporting in accordance with 40CFR370.2(5)</td> </tr> </tbody> </table>										Chemical	CAS NO.	Percent by Weight	CERCLA RQ (lbs)*	SARA (1986) Reporting			311	312	313	Dicalcium phosphate dihydrate	7757-93-9	75	NA	no*	no*	no	Monocalcium phosphate monohydrate	7758-23-8	19	NA	no*	no*	no	Note * Exempt from reporting in accordance with 40CFR370.2(5)						
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<b>CERCLA/Superfund, 40 CFR Parts 117, 302:</b>	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.																																								
<b>CANADA:</b>	<b>WHMIS Hazard Symbol and classification:</b>				This product is not WHMIS controlled																																				
	<b>Ingredient Disclosure List</b>				This product does contain ingredient(s) on this list.																																				
	<b>Environmental Protection:</b>				All intentional ingredients are listed on the DSL (Domestic Substance List).																																				
<b>EINECS#:</b>	(dicalcium phosphate dihydrate) 231-826-1 (monocalcium phosphate monohydrate) 231-837-1																																								
<b>California: Prop 65:</b>	This is not a chemical known to cause cancer, nor is it listed.																																								

## Section XVI – Other Information

<b>NFPA Hazard Ratings:</b>	<b>Health:</b> 1	<b>Fire:</b> 0	<b>Reactivity:</b> 0	<b>Special Hazards:</b>
	<b>0 = Insignificant      1 = Slight      2 = Moderate      3 = High      4 = Extreme</b>			
<b>COMMENTS:</b>	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 Dicalcium Phosphate (18.5% P) for PCS Sales (USA) Inc. Our product is created through a chemical process.			
<b>Section(s) changed since last revision:</b>	I XV			

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