



# Dicalcium Phosphate (18.5% P)

Safety Data Sheet 205

Revision date: 07/01/2015

Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixture  
Product name : Dicalcium Phosphate (18.5% P)  
Product code : DCP, DCPBG, DCPOS  
Synonyms : DCP, Dical, Calcium Hydrogen Phosphate  
Product group : Commercial product  
Other means of identification : Calcium Phosphate Dibasic

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation : Animal and Poultry Feeds

### 1.3. Details of the supplier of the safety data sheet

PCS Sales (USA), Inc.  
1101 Skokie Blvd.  
Suite 400  
Northbrook, IL 60062  
T 800-241-6908 / 847-849-4200

Suite 500  
122 1st Avenue South  
Saskatoon, Saskatchewan Canada S7K7G3  
T 800-667-0403 (Canada) / 800-667-3930 (USA)

[SDS@PotashCorp.com](mailto:SDS@PotashCorp.com) - [www.PotashCorp.com](http://www.PotashCorp.com)

### 1.4. Emergency telephone number

Emergency number : 800-424-9300  
CHEMTREC

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GHS-US classification

Skin Irrit. 2 H315  
Eye Irrit. 2A H319  
STOT SE 3 H335

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## 2.2. Label elements

### GHS-US labelling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US)

: Warning

Hazard statements (GHS-US)

: H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation

Precautionary statements (GHS-US)

: P261 - Avoid breathing dust  
P264 - Wash hands thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear eye protection, face protection, protective clothing, protective gloves  
P302+P352 - IF ON SKIN: Wash with plenty of water  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a POISON CENTER/doctor if you feel unwell  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P337+P313 - If eye irritation persists: Get medical advice/attention  
P362 - Take off contaminated clothing  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/container according to local, regional, national, and international regulations

## 2.3. Other hazards

Hazardous to the aquatic environment.

Per OSHA 29 CFR 1910.1200(b)(5)(iii) labelling is not required for these product(s) as labelling is covered under the requirements of the Food and Drug Administration (FDA) or the US Department of Agriculture (USDA).

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Calcium hydrogen phosphate	(CAS No.) 7757-93-9	54.2	Not classified
Calcium dihydrogen phosphate	(CAS No.) 7758-23-8	19.1	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

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Name	Product identifier	%	GHS-US classification
Magnesium, iron, aluminum phosphates and sulfates	Mixture	4	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Moisture, residual	(CAS No.) 7732-18-5	1.8	Not classified
Fluoride, as F (max)		0.185	

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : If medical advice is needed, have product container or label at hand.
- First-aid measures after inhalation : If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists. Keep warm.
- First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists.
- First-aid measures after eye contact : Obtain medical attention if irritation develops or persists. Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open.
- First-aid measures after ingestion : Do not induce vomiting. If victim is conscious and alert, give 4 to 8 ounces of water or milk. Do not give anything by mouth to an unconscious person. Get medical advice and attention if you feel unwell. Seek medical attention if a large amount is swallowed.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Irritation to eyes, skin and respiratory tract.
- Symptoms/injuries after inhalation : Inhalation of a large amount of dust may cause respiratory irritation with difficulty in breathing, sore throat, and cough.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : May cause serious eye irritation.
- Symptoms/injuries after ingestion : If a large quantity has been ingested : Gastrointestinal irritation. Abdominal pain. Diarrhea. Nausea. Vomiting.

### 4.3. Indication of any immediate medical attention and special treatment needed

If ingested by a child, water or milk should not exceed 4 ounces.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Not flammable. Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Material is a non-flammable inorganic salt. Under conditions of fire this material may produce: Oxides of calcium. Oxides of phosphorus.
- Explosion hazard : Product is not explosive.

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Reactivity : Stable at ambient temperature and under normal conditions of use.

## 5.3. Advice for firefighters

Firefighting instructions : Keep upwind. Not flammable.

Protection during firefighting : Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Other information : Do not allow run-off from fire fighting to enter drains or water courses.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing, gloves and eye/face protection. Tight fitting goggles should be worn in dusty areas to reduce dust exposure to the eyes

Emergency procedures : Collect as any solid. Ventilate area.

#### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye/face protection.

Emergency procedures : If possible, stop flow of product. Contain and collect as any solid. Ventilate area.

### 6.2. Environmental precautions

If spill could potentially enter any waterway, including intermittent dry creeks, contact the U.S. COAST GUARD NATIONAL RESPONSE CENTER at 800-424-8802. In case of accident or road spill notify CHEMTREC at 800-424-9300. In other countries call CHEMTREC at (International code) +1-703-527-3887.

### 6.3. Methods and material for containment and cleaning up

For containment : If contaminated with other materials, contain and collect as any solid in suitable containers. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Prevent large quantities from contacting vegetation.

Methods for cleaning up : Recover the product by vacuuming, shoveling or sweeping and place in appropriate container to be disposed at an appropriate disposal facility according to current applicable laws and regulations and product characteristics at the time of disposal. Provide adequate ventilation. Avoid generation of dust during clean-up of spills. If uncontaminated, recover and reuse product.

Practice good housekeeping – spillage can be slippery on smooth surface either wet or dry.

### 6.4. Reference to other sections

No additional information available

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Use recommended personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust.
- Hygiene measures : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store away from fire hazards.
- Incompatible materials : None known.

### 7.3. Specific end use(s)

Animal and Poultry Feeds

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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USA ACGIH (nuisance dust)	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> – inhalation particulate
USA OSHA (nuisance dust)	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> – respirable (particulate)

### 8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas. Local exhaust or other ventilation should keep dust below Permissible Exposure Limits.
- Personal protective equipment : Gloves. Safety glasses. Protective clothing.



- Hand protection : Impermeable protective gloves.
- Eye protection : Protective goggles. Tight fitting goggles should be worn in dusty areas to reduce dust exposure to the eyes
- Skin and body protection : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wear suitable protective clothing. Wash contaminated clothing before reuse.
- Respiratory protection : Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Granules

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Colour	: Light Gray
Odour	: Odourless
Odour threshold	: No data available
pH	: 3.4 (10% slurry)
Molecular weight	: 136.08
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 2.3 g/cm <sup>3</sup> Bulk density: 58 to 61 lbs/ft <sup>3</sup>
Solubility	: 0.0316 g/ 0.1 L at 38 °C (calcium hydrogen phosphate)
Log Pow	: No data available
Log Kow	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

## 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable at ambient temperature and under normal conditions of use.

### 10.2. Chemical stability

Stable at standard temperature and pressure.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Protect from moisture.

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## 10.5. Incompatible materials

None known.

## 10.6. Hazardous decomposition products

Under conditions of fire this material may produce: Oxides of calcium, Oxides of phosphorus.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Calcium hydrogen phosphate (7757-93-9)	
LD50 oral rat	10000 mg/kg
LD50 dermal rabbit	> 7940 mg/kg

Calcium dihydrogen phosphate (7758-23-8)	
LD50 oral rat	3986 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
Specific target organ toxicity (single exposure) : May cause respiratory irritation.  
Specific target organ toxicity (repeated exposure) : Not classified  
Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

<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>Environmental Fate:</b>	<b>Toxicity to Terrestrial Plants:</b>	No data available
	<b>Stability in Water:</b>	No data available
	<b>Stability in Soil:</b>	No data available
<b>Toxicity:</b>	<b>Transport and Distribution:</b>	No data available
	Non-toxic to aquatic organisms as defined by USEPA.	

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<b>Degradation Products:</b>	<b>Biodegradation:</b>	No data available
	<b>Photodegradation:</b>	No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Sewage disposal recommendations : This material is hazardous to the aquatic environment. Keep out of sewers and waterways.
- Waste disposal recommendations : Place in an appropriate container and dispose of the contaminated material at a licensed site.
- Additional information : Dispose of waste material in accordance with all local, regional, national, and international regulations.

## SECTION 14: Transport information

In accordance with DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA

### 14.1. UN number

No dangerous good in sense of transport regulations.

### 14.2. UN proper shipping name

Not applicable

### 14.2 Additional information

Other information : No supplementary information available.

### Overland transport

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>Dicalcium Phosphate (18.5% P)</b>	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
<b>Calcium hydrogen phosphate (7757-93-9)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Calcium dihydrogen phosphate (7758-23-8)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. US State regulations

No additional information available



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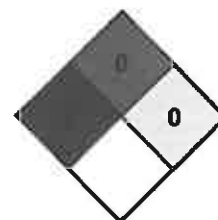
## 15.3. Canadian regulations

<b>Dicalcium Phosphate (18.5% P)</b>	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
<b>Calcium hydrogen phosphate (7757-93-9)</b>	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
<b>Calcium dihydrogen phosphate (7758-23-8)</b>	
Listed on the Canadian DSL (Domestic Substances List) inventory.	

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

## SECTION 16: Other information

Other information	: This product is TSE/BSE (Transmissible Spongiform Encephalopathy/Bovine Spongiform Encephalopathy) free. No animal constituents are used in the manufacture of Defluorinated Phosphate for PCS Sales (USA) Inc. Our product is created through a chemical process.
NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Full text of H- phrases:

Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	H335 – May cause respiratory irritation
H315	Causes skin irritation
H319	Causes serious eye irritation

Previous PotashCorp MSDS Number : MSDS 16 – Dicalcium Phosphate (18.5%P)

Section(s) Updated : Section 2.3 – Other Hazards

SDS US (GHS Hazcom 2012)

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