

## Safety Data Sheet

**Section 1: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product identifier**

<b>Product Name</b>	● <b>Granular Triple Super Phosphate</b>
<b>Synonyms</b>	● Calcium Biphosphate; Calcium bis(dihydrogenorthophosphate); Calcium Dihydrogen Orthophosphate; Calcium Superphosphate; Monocalcium Phosphate, Anhydrous
<b>CAS Number</b>	● 7758-23-8
<b>SDS Number/Grade</b>	● 17
<b>EC Number</b>	● 231-837-1
<b>REACH Registration Number</b>	● 01-2119490065-39-0016
<b>Molecular Formula</b>	● :H 6:O 8:P 2:Ca 1:
<b>Molecular Weight</b>	● 234

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

<b>Relevant identified use(s)</b>	● Agriculture Chemical
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**1.3 Details of the supplier of the safety data sheet**

<b>Manufacturer</b>	● Innophos 259 Prospect Plains Rd. Bldg A Cranbury, NJ 08512-3706 United States
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**Telephone (Technical)** ● 609-495-2495

**1.4 Emergency telephone number**

<b>Manufacturer</b>	● 800-424-9300 - Chemtrec - within USA and Canada
<b>Manufacturer</b>	● +1 703-527-3887 - Chemtrec - outside USA and Canada (collect calls accepted)
<b>Manufacturer</b>	● 615-386-7816 - Innophos Emergency Communication Team (ECT)

**Section 2: Hazards Identification****EU/EEC**

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

**2.1 Classification of the substance or mixture**

<b>CLP</b>	● Serious Eye Damage 1 - H318
<b>DSD/DPD</b>	● Irritant (Xi) R41

**2.2 Label Elements**

**CLP**

**DANGER**



**Hazard statements** ● H318 - Causes serious eye damage

**Precautionary statements**

**Prevention** ● P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**Response** ● P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER or doctor/physician.

**DSD/DPD**



**Risk phrases** ● R41 - Risk of serious damage to eyes.

**Safety phrases** ● S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S39 - Wear eye/face protection.

**2.3 Other Hazards**

**CLP** ● According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

**DSD/DPD** ● This product is considered dangerous according to the European Directive 67/548/EEC.

**United States (US)**

According to OSHA 29 CFR 1910.1200 HCS

**2.1 Classification of the substance or mixture**

**OSHA HCS 2012** ● Serious Eye Damage 1 - H318

**2.2 Label elements**

**OSHA HCS 2012**

**DANGER**



**Hazard statements** ● Causes serious eye damage - H318

**Precautionary statements**

**Prevention** ● Wear protective gloves/protective clothing/eye protection/face protection. - P280

**Response** ● IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338  
Immediately call a POISON CENTER or doctor/physician. - P310

**2.3 Other hazards**

**OSHA HCS 2012** ● Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

**Canada**

According to WHMIS

## 2.1 Classification of the substance or mixture

### WHMIS

- Corrosive - E

## 2.2 Label elements

### WHMIS



- Corrosive - E

## 2.3 Other hazards

### WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Phosphoric acid, calcium salt (2:1)	CAS:7758-23-8 EC Number:231-837-1	100%	Ingestion/Oral-Rat LD50 • 3986 mg/kg Skin-Rabbit LD50 • >2 g/kg	EU DSD/DPD: Self Classified: Xi R41 EU CLP: Self Classified: Eye Irrit. 1, H318 OSHA HCS 2012: Eye Irrit. 1	NDA

### 3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

#### Inhalation

- If signs/symptoms develop, move person to fresh air. If signs/symptoms continue, get medical attention.

#### Skin

- IF ON SKIN: Wash with plenty of soap and water. If irritation develops and persists, get medical attention. Take off contaminated clothing and wash before reuse.

#### Eye

- In case of contact with substance, immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention.

#### Ingestion

- Do not induce vomiting unless instructed to do so by a physician. If victim is conscious and alert, give 2-3 glasses of water to drink. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

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

- Refer to Section 11 - Toxicological Information.

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

**Notes to Physician**

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

**4.4 Other information**

- Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**Section 5 - Firefighting Measures****5.1 Extinguishing media**

**Suitable Extinguishing Media** • Not combustible. Use extinguishing media suitable for surrounding fire.

**Unsuitable Extinguishing Media** • None known.

**5.2 Special hazards arising from the substance or mixture**

**Unusual Fire and Explosion Hazards** • Non-combustible.

**Hazardous Combustion Products** • None known.

**5.3 Advice for firefighters**

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Keep unauthorized personnel away.

**Section 6 - Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** • Do not touch or walk through spilled material.

**Emergency Procedures** • Keep unauthorized personnel away. Wear appropriate protective gear.

**6.2 Environmental precautions**

- Spills may be reportable to the National Response Center (800 -424-8802) and to state and/or local agencies.

**6.3 Methods and material for containment and cleaning up**

**Containment/Clean-up Measures** • Sweep or vacuum up and place in an appropriate closed container. Avoid generating dust. Clean up residual material by washing area with water and detergent. Collect washings for disposal. Do not return material to its original container.

**6.4 Reference to other sections**

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

**Section 7 - Handling and Storage****7.1 Precautions for safe handling**

**Handling** • This is a food ingredient intended for human consumption. Keep containers closed when not in use. Avoid breathing dust. Avoid direct or prolonged contact with skin and eyes.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage** • Store in closed containers. Store in an area that is cool, dry, sanitary, well -ventilated, isolated from all toxic and harmful substances. This product is hygroscopic and tends to cake on storage.

## 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

### 8.2 Exposure controls

#### Engineering Measures/Controls

- Dilution ventilation. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

#### Personal Protective Equipment

##### Respiratory

- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

##### Eye/Face

- Wear eye protection.

##### Hands

- Wear appropriate gloves.

##### Skin/Body

- Wear long sleeves and/or protective coveralls.

#### General Industrial Hygiene Considerations

- Wash hands before eating.

#### Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

STEL = Short Term Exposure Limits are based on 15-minute exposures

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Colorless, pearly scales or powder with no odor.
Color	Colorless	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	4.2
Specific Gravity/Relative Density	0.59 Water=1	Water Solubility	Moderately soluble
Viscosity	Data lacking	Explosive Properties	Not Explosive.
Oxidizing Properties:	Not an Oxidizer.		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			

Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Not Flammable.		
<b>Environmental</b>			
Octanol/Water Partition coefficient	Data lacking		

## 9.2 Other Information

- No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

- Dusting conditions. Heat Extreme humidity.

### 10.5 Incompatible materials

- None known.

### 10.6 Hazardous decomposition products

- None known.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

	CAS	
Monocalcium Phosphate Anhydrous	7758-23-8	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 3986 mg/kg; <i>Sense Organs and Special Senses:Eye:Ptosis; Behavioral:Somnolence (general depressed activity); Skin and Appendages:Other:Hair;</i> Skin-Rabbit LD50 • >2 g/kg; <i>Skin and Appendages:After systemic exposure:Dermatitis, other;</i> <b>Irritation:</b> Eye-Rabbit • Severe irritation • Comments: Washed; Skin-Rabbit • Essentially non-irritating • Comments: At 4 hours

GHS Properties	Classification
<b>Acute toxicity</b>	<b>EU/CLP</b> • Acute Toxicity - Classification criteria not met; Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Data lacking; Acute Toxicity - Oral - Classification criteria not met <b>OSHA HCS 2012</b> • Acute Toxicity - Data lacking; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
<b>Aspiration Hazard</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Classification criteria not met
<b>Carcinogenicity</b>	<b>EU/CLP</b> • Classification criteria not met <b>OSHA HCS 2012</b> • Classification criteria not met

<b>Germ Cell Mutagenicity</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Skin corrosion/Irritation</b>	EU/CLP • Inconclusive data OSHA HCS 2012 • Classification criteria not met
<b>Skin sensitization</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>STOT-RE</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>STOT-SE</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>Toxicity for Reproduction</b>	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
<b>Respiratory sensitization</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>Serious eye damage/Irritation</b>	EU/CLP • Serious Eye Damage 1 OSHA HCS 2012 • Serious Eye Damage 1

**Route(s) of entry/exposure**

- Inhalation, Skin, Eye, Ingestion

**Medical Conditions Aggravated by Exposure**

- Disorders of the lungs. Skin/Dermal .

**Potential Health Effects**

**Inhalation**

**Acute (Immediate)**

- Exposure to dust may cause irritation. Nuisance dust may affect the lungs but reactions are typically reversible.

**Chronic (Delayed)**

- No data available

**Skin**

**Acute (Immediate)**

- Exposure to dust may cause mechanical irritation.

**Chronic (Delayed)**

- No data available.

**Eye**

**Acute (Immediate)**

- Causes serious eye damage. Can cause corneal scratch, eye injury which may persist for several days.

**Chronic (Delayed)**

- No data available.

**Ingestion**

**Acute (Immediate)**

- Ingestion of large quantities may cause nausea, vomiting, diarrhea and abdominal cramps.

**Chronic (Delayed)**

- No data available.

**Carcinogenic Effects**

- This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

**Key to abbreviations**

LD = Lethal Dose

**Section 12 - Ecological Information**

**12.1 Toxicity**

- No data found for product.

**12.2 Persistence and degradability**

- No data found for product.

### 12.3 Bioaccumulative potential

- No data found for product.

### 12.4 Mobility in Soil

- No data found for product.

### 12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been carried out.

### 12.6 Other adverse effects

- No studies have been found.

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

#### Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

#### Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not regulated	NDA	NDA	NDA
TDG	NDA	Not regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not regulated	NDA	NDA	NDA

#### 14.6 Special precautions for user

- None known.

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

#### 14.8 Other information

- The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### SARA Hazard Classifications

- Acute

#### Canada

##### Labor

##### Canada - WHMIS - Classifications of Substances

• Monocalcium Phosphate Anhydrous

7758-23-8

Not Listed

**Canada - WHMIS - Ingredient Disclosure List**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**Environment****Canada - CEPA - Priority Substances List**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**Germany****Environment****Germany - TA Luft - Types and Classes**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**Germany - Water Classification (VwVwS) - Annex 1**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**Germany - Water Classification (VwVwS) - Annex 3**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**Philippines****Other****Philippines - Priority Chemical List**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**Singapore****Other****Singapore - Corrosive and Explosive Substances - Corrosive Substances**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**United States****Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - OSHA - Specifically Regulated Chemicals**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**Environment****U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - CAA (Clean Air Act) - Class II Ozone Depletors**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**United States - California****Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - California - Proposition 65 - Developmental Toxicity**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

• Monocalcium Phosphate Anhydrous	7758-23-8	Not Listed
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**15.2 Chemical Safety Assessment**

- No Chemical Safety Assessment has been carried out.

**15.3 Other Information**

- FDA Status: This product meets the compositional requirements of: 21 CFR 182.1217 CALCIUM PHOSPHATE

**Section 16 - Other Information****Last Revision Date**

- 03/April/2014

**Preparation Date**

- 13/August/2004

**Disclaimer/Statement of Liability**

- The information herein is given in good faith but no warranty, expressed or implied, is made.

**Key to abbreviations**

NDA = No Data Available