Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • Cal-Rise®

Synonyms • Calcium Phosphate Leavening Agent

SDS Number/Grade • 43

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

Relevant identified use(s) • Calcium based leavening agent

1.3 Details of the supplier of the safety data sheet

Manufacturer • Innophos

259 Prospect Plains Rd. Bldg A

Cranbury, NJ 08512-3706

United Štates

Telephone (Technical) • 609-495-2495

1.4 Emergency telephone number

Manufacturer • 800-424-9300 - Chemtrec - within USA and Canada

Manufacturer • +1 703-527-3887 - Chemtrec - outside USA and Canada (collect calls accepted)

Manufacturer • 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

Skin Irritation 2 - H315 Eye Irritation 2 - H319

Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335

DSD/DPD • Irritant (Xi)

R36/37/38

2.2 Label Elements

CLP

WARNING



Hazard statements . H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements

Prevention • P261 - Avoid breathing dust, fume, gas, mist, vapours and/or spray.

P264 - Wash thoroughly after handling.

P280 - Wear eye/face protection, .

Response P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P332+P313 - If skin irritation occurs: Get medical advice/attention.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P362 - Take off contaminated clothing and wash before reuse.

Storage/Disposal •

P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



Risk phrases . R36 - Irritating to eyes.

Safety phrases S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other Hazards

CLP

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

DSD/DPD

According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

Skin Irritation 2 - H315 Eye Irritation 2 - H319

Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335

2.2 Label elements

OSHA HCS 2012

WARNING



Hazard statements . Causes skin irritation - H315

Causes serious eve irritation - H319 May cause respiratory irritation - H335

Precautionary statements

Prevention .

Avoid breathing dust, fume, gas, mist, vapours and/or spray. - P261

Wash thoroughly after handling. - P264

Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response .

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. - P304+P340

IF ON SKIN: Wash with plenty of soap and water. - P302+P352

If skin irritation occurs: Get medical advice/attention. - P332+P313

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. - P305+P351+P338 If eye irritation persists: Get medical advice/attention. - P337+P313

Storage/Disposal • Store in a well-ventilated place. Keep container tightly closed. - P403+P233

Dispose of content and/or container in accordance with local, regional, national, and/or

international regulations. - P501

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

Other Toxic Effects - D2B

2.2 Label elements

WHMIS



Other Toxic Effects - D2B

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

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

3.2 Mixtures

Composition					_
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Calcium dihydrogenpyrophosphate	CAS:14866-19-4 EC Number:238- 933-2	< 75%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Phosphoric acid, calcium salt (2:1)	CAS:7758-23-8 EC Number:231- 837-1	> 25%	Ingestion/Oral-Rat LD50 • 3986 mg/kg Skin-Rabbit LD50 • >2 g/kg	EU DSD/DPD: Self Classified: Xi R36/37/38 EU CLP: Self Classified: Eye Irrit., H319, Skin Irrit, H315, STOT SE 3 (Resp Irrit), H335 OSHA HCS 2012: Self Classified: Eye Irrit, Skin Irrit, STOT SE 3 (Resp Irrit)	NDA

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

Move victim to fresh air. If signs/symptoms continue, get medical attention.

Skin

Wash skin with soap and water. For minor skin contact, avoid spreading material on unaffected skin. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical

advice/attention.

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

If swallowed give 2-3 glasses of water if victim is conscious and alert. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. Obtain medical attention immediately if ingested. Do not use mouth-to-mouth method if victim ingested the substance. Do not leave victim unattended. To prevent aspiration of

swallowed product, lay victim on side with head lower than waist. 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. Keep victim warm and quiet.

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

Not combustible.

Hazardous Combustion

Products

No data available

5.3 Advice for firefighters

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Wear positive pressure self-contained breathing apparatus (SCBA).

Keep unauthorized personnel away.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ventilate enclosed areas. Do not touch damaged containers or spilled material unless

wearing appropriate protective clothing.

Emergency Procedures

Keep unauthorized personnel away.

6.2 Environmental precautions

 Do not flush to drain. 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 a cool, dry place. Store in tightly closed containers. Store in an area that is sanitary and isolated from all toxic and harmful substances. Expected shelf life if stored at recommended temperatures: 12 months. 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

 Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

 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 face shield and eye protection. Wear splash goggles. An emergency eye wash must be readily accessible to the work area.

Skin/Body

Wear appropriate gloves. Wear protective clothing

General Industrial Hygiene Considerations

• Do not get in eyes or on skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls

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

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	White powder with no odor.
Color	White	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	рН	4.2
Specific Gravity/Relative Density	Data lacking	Water Solubility	Slightly Soluble
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility	•		
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability	•		
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
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

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Dusting conditions, extreme heat, extreme humidity.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

No data available

Section 11 - Toxicological Information

11.1 Information on toxicological effects

	CAS	
Cal-Rise®	NDA	Acute Toxicity: Ingestion/Oral-Rat LD50 • 3986 mg/kg • Comments: Female Rat; Ingestion/Oral-Rat, adult male LD50 • 5000 mg/kg; Skin-Rabbit LD50 • 2000 mg/kg; Irritation: Eye-Rabbit • Severe irritation, irreversible, burns (corrosive); Skin-Species unspecified • 4 Hour (s) • Essentially non-irritating
		Components
Phosphoric acid, calcium salt (2:1) (> 25%)	7758-23-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 3986 mg/kg; Sense Organs and Special Senses:Eye:Ptosis; Behavioral:Somnolence (general depressed activity); Skin and Appendages:Other:Hair; Skin-Rabbit LD50 • >2 g/kg; Skin and Appendages:After systemic exposure:Dermatitis, other

GHS Properties	Classification
Acute toxicity	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Aspiration Hazard	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Carcinogenicity	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Germ Cell Mutagenicity	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2
Skin sensitization	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
STOT-RE	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Toxicity for Reproduction	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Respiratory sensitization	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2

Route(s) of entry/exposure **Medical Conditions** Aggravated by Exposure **Potential Health Effects** Inhalation, Skin, Eye, Ingestion Disorders of the lungs. Skin/Dermal .

Inhalation

Acute (Immediate)

Chronic (Delayed)

Skin Acute (Immediate)

Chronic (Delayed)

- Nuisance dust may affect the lungs but reactions are typically reversible.
- No data available.
- Exposure to dust may cause mechanical irritation.
- No data available.

Eye

Acute (Immediate)

Chronic (Delayed)

Ingestion

Acute (Immediate)

Chronic (Delayed)

Carcinogenic Effects

. Causes serious eye irritation.

No data available.

- Ingestion of large quantities may cause nausea, vomiting, diarrhea and abdominal discomfort.
- No data available.
- 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

Ecological Fate

No data found for product.

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 • None specified.

user

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

Data lacking.

Section 15 - Regulatory Information

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

SARA Hazard Classifications . Acute

			Inventory				
Component	CAS	Canada DSL	Canada NDSL	China	EU EIN	ECS	EU ELNICS
Calcium dihydrogenpyrophosphate	14866-19-4	Yes	No	No	Yes	S	No
Phosphoric acid, calcium salt (2:1)	7758-23-8	Yes	No	Yes	Yes	S	No
			Inventory (Con't.)			
Component	(CAS N	lew Zealand	Philippines PIC	cs	7	TSCA
Calcium dihydrogenpyrophosphate	1486	6-19-4	No	No			No
Phosphoric acid, calcium salt (2:1)	7758	-23-8	Yes	Yes			Yes

Canada

Labor

:anada -	WHMIS -	Classifications	of Substances

Cal-Rise® as Particulates not otherwise classified (PNOC)
 Phosphoric acid, calcium salt (2:1)
 Calcium dihydrogenpyrophosphate
 Not Listed
 Not Listed
 Not Listed

Canada - WHMIS - Ingredient Disclosure List

Cal-Rise® as Particulates not otherwise classified (PNOC)
 Phosphoric acid, calcium salt (2:1)
 Calcium dihydrogenpyrophosphate
 Not Listed
 Not Listed
 Not Listed

Environment

Canada - CEPA - Priority Substances List

Cal-Rise® as Particulates not otherwise classified (PNOC)
 Phosphoric acid, calcium salt (2:1)
 Calcium dihydrogenpyrophosphate
 Not Listed
 Not Listed
 Not Listed

Germany

Environment

Germany - TA Luft - Types and Classes

Cal-Rise® as Particulates not otherwise classified (PNOC)
 Phosphoric acid, calcium salt (2:1)
 Calcium dihydrogenpyrophosphate
 Not Listed
 Not Listed
 Not Listed

Germany - Water Classification (VwVwS) - Annex 1

7758-23-8 14866-19-4 7758-23-8	Not Listed Not Listed
	Not Listed
7750 22 0	
7750 00 0	
7750 22 0	
1100-23-8	Not Listed
14866-19-4	Not Listed
	Not Listed
7758-23-8	Not Listed
1/866-10-/	Not Listed
	7758-23-8 14866-19-4

Philippines

	Not Listed
7758-23-8	Not Listed
14866-19-4	Not Listed

Singapore

Singapore - Corrosive and Explosive Substances - Corrosive Substa	nces	
Cal-Rise® as Particulates not otherwise classified (PNOC)		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed

United States

J.S OSHA - Process Safety Management - Highly Hazardous Chemicals		NI (III (I
 Cal-Rise® as Particulates not otherwise classified (PNOC) 		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S OSHA - Specifically Regulated Chemicals		
Cal-Rise® as Particulates not otherwise classified (PNOC)		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed

Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
Environment		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
Cal-Rise® as Particulates not otherwise classified (PNOC)		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S CAA (Clean Air Act) - Class II Ozone Depletors		
Cal-Rise® as Particulates not otherwise classified (PNOC)		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
Cal-Rise® as Particulates not otherwise classified (PNOC)		Not Listed

Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
 Cal-Rise® as Particulates not otherwise classified (PNOC) 		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
 Cal-Rise® as Particulates not otherwise classified (PNOC) 		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
Cal-Rise® as Particulates not otherwise classified (PNOC)		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Cal-Rise® as Particulates not otherwise classified (PNOC)		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Cal-Rise® as Particulates not otherwise classified (PNOC)		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed

United States - California

Environment		
U.S California - Proposition 65 - Carcinogens List		
 Cal-Rise® as Particulates not otherwise classified (PNOC) 		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
 Cal-Rise® as Particulates not otherwise classified (PNOC) 		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
 Cal-Rise® as Particulates not otherwise classified (PNOC) 		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
 Cal-Rise® as Particulates not otherwise classified (PNOC) 		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
 Cal-Rise® as Particulates not otherwise classified (PNOC) 		Not Listed
Phosphoric acid, calcium salt (2:1)	7758-23-8	Not Listed
Calcium dihydrogenpyrophosphate	14866-19-4	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Cal-Rise® as Particulates not otherwise classified (PNOC)

• Phosphoric acid, calcium salt (2:1)

• Calcium dihydrogenpyrophosphate

Not Listed Not Listed

14866-19-4 Not Listed

7758-23-8

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 Preparation Date

Disclaimer/Statement of Liability

Key to abbreviations NDA = No Data Available 03/April/2014

- 13/August/2004
- The information herein is given in good faith but no warranty, expressed or implied, is made.