

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

1.1. Product identifier

Product form	: Substance
Trade name	: Monocalcium phosphate
Chemical name	: Calcium bis(dihydrogenorthophosphate)
EC-No.	: 231-837-1
CAS-No.	: 7758-23-8
Type of product	: Mineral
Formula	: $\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot \text{H}_2\text{O}$
Product group	: Raw material

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Animal feed

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

PHOSPHEA DANUBE
Kneza Miloša 93
1100 - Serbia
T +33 2 99 16 53 00 - F +33 2 99 16 53 00
contact@phosphea.com

Company / Registered office

TIMAB INDUSTRIES
57 Boulevard Jules Verger
35800 Dinard - France
T +33 2 99 16 53 00 - F +33 2 99 16 51 60
contact@phosphea.com - www.phosphea.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
	USA POISON CONTROL CENTER (24h/7d)		1-800-222-1222	
Americas	3E		+1-760-476-3962 (Access code : 333021)	(24/7)
Australia	NSW Poisons Information Centre The Children's Hospital at Westmead	Locked Bag 4001 NSW 2145 Westmead	13 11 26	
Europe/Middle-East/Africa	3E		+1-760-476-3961 (Access code : 333021)	(24/7)
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H318 - Causes serious eye damage.

Precautionary statements (CLP) :

P280 - Wear protective gloves, protective clothing, eye protection, face protection.
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, a doctor.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium bis(dihydrogenorthophosphate)	(CAS-No.) 7758-23-8 (EC-No.) 231-837-1	100	Eye Dam. 1, H318

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. If not breathing, give artificial respiration. If irritation persists, consult a doctor.

First-aid measures after skin contact : Remove all contaminated clothing and footwear. Rinse with plenty of water. If case of redness or irritation, call a doctor.

First-aid measures after eye contact : Wash immediately with plenty water (during 20 minutes), also under eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist immediately, even if there are no immediate symptoms. If possible show him this sheet. Failing this, show him the packaging or label.

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First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting without medical advice. If swallowed, seek medical advice immediately and show this container or label.

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

Symptoms/effects after eye contact : Serious damage to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : water, carbon dioxide (CO₂), powder and foam. Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : On combustion or on thermal decomposition (pyrolysis) releases : Phosphorus oxides. Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Complete protective clothing. EN 469. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Clean up immediately by sweeping or vacuum. Minimise generation of dust. Collect up the product and place it in a spare container suitably labelled.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not breathe dust. Use personal protective equipment as required. Avoid contact with eyes. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

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Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Special rules on packaging : Keep only in original container. Store in a closed container.

7.3. Specific end use(s)

(see section(s) : 1.2. Relevant identified uses of the substance or mixture and uses advised against).

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Calcium bis(dihydrogenorthophosphate) (7758-23-8)	
France - Occupational Exposure Limits	
VME [mg/m ³]	10 mg/m ³ Assessed dust without specific effect (other particles, not classified anywhere else)
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m ³)	10 mg/m ³ inhalable dust

Calcium bis(dihydrogenorthophosphate) (7758-23-8)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	4,07 mg/m ³ (Results obtained on a similar product)
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	3,04 mg/m ³ (Results obtained on a similar product)
PNEC (STP)	
PNEC sewage treatment plant	50 mg/l (Results obtained on a similar product)

DNEL : 4,07 mg/m³ (Results obtained on a similar product)

PNEC : 50 mg/l (Results obtained on a similar product)

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Local exhaust and general ventilation must be adequate to meet exposure standards.

Personal protective equipment:

Safety glasses. Gloves. Protective clothing.

Hand protection:

Neoprene protective gloves. Butyl-rubber protective gloves. Nitrile rubber. PVC gloves

Eye protection:

Safety glasses with side guards should be worn to prevent injury from airborne particles and/or other eye contact with this product. EN 166

Skin and body protection:

Protective clothing

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Personal protective equipment symbol(s):



Environmental exposure controls:

Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. Assume that emissions are compliant with all applicable air pollution control regulations. Comply with applicable regulations.

Other information:

See Heading 7 : 7.1. Precautions for safe handling.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granulate.
Colour	: White.
Odour	: Odourless.
Odour threshold	: Not established
pH	: 3 – 4,5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: > 450 °C
Freezing point	: No data available
Boiling point	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,7 – 0,8 g/cm ³
Solubility	: Poorly soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: Not specifically applicable
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

On exposure to high temperature, may decompose, releasing toxic gases.

10.4. Conditions to avoid

No additional information available

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10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

On combustion or on thermal decomposition (pyrolysis) releases : Phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Calcium bis(dihydrogenorthophosphate) (7758-23-8)

LD50 oral rat	3986 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 2,6 mg/l/4h (OECD 403)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 3 – 4,5
Serious eye damage/irritation : Causes serious eye damage. ((OECD 405 method))
pH: 3 – 4,5
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met (read-across))
Carcinogenicity : Not classified (Lack of data)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : NOAEL (oral, rat) : >= 500 mg/kg (read-across)
STOT-single exposure : Not classified (Lack of data)
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Technical impossibility to obtain the data)

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Calcium bis(dihydrogenorthophosphate) (7758-23-8)

LC50 fish 1	> 100 mg/l/96h (Oncorhynchus mykiss) (read-across)
EC50 Daphnia 1	> 100 mg/l/48h (Daphnia magna) (read-across)
ErC50 (algae)	> 100 mg/l/72h (Desmodesmus subspicatus) (read-across)

12.2. Persistence and degradability

Calcium bis(dihydrogenorthophosphate) (7758-23-8)

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

Calcium bis(dihydrogenorthophosphate) (7758-23-8)

Partition coefficient n-octanol/water (Log Pow)	Not specifically applicable
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

Calcium bis(dihydrogenorthophosphate) (7758-23-8)

Mobility in soil	No data available
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12.5. Results of PBT and vPvB assessment

Calcium bis(dihydrogenorthophosphate) (7758-23-8)

Results of PBT assessment	The product does not meet the PBT and vPvB classification criteria
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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not applicable

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Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Calcium bis(dihydrogenorthophosphate) is not on the REACH Candidate List

Calcium bis(dihydrogenorthophosphate) is not on the REACH Annex XIV List

Monocalcium phosphate is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Monocalcium phosphate is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the Canadian DSL (Domestic Substances List)

Germany

Water hazard class (WGK)

: WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 9501)

Hazardous Incident Ordinance (12. BImSchV)

: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen

: The substance is not listed

SZW-lijst van mutagene stoffen

: The substance is not listed

NIET-limitatieve lijst van voor de voortplanting

: The substance is not listed

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

: The substance is not listed

giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

: The substance is not listed

giftige stoffen – Ontwikkeling

Denmark

Danish National Regulations

: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
EC50	Median effective concentration
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
LD50	Median lethal dose

Data sources : Chemical safety report (CSR). IUCLID. HSDB (Hazardous Substances Data Bank). Safety Data Sheet Supplier.

Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H318	Causes serious eye damage.

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SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.