SAFETY DATA SHEET

Date of Issue: February 2004
Revision: Dec 2020

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Product Identifier: SUPERPHOSPHATE

1.2 Relevant uses of the substance or mixture and uses advised against:
Fertiliser

1.3 Manufacturer/Distributor: Vitax Limited, Owen Street, Coalville LE67 3DE
Tel: 01530 510060 Fax: 01530 510299 Email: info@vitax.co.uk

1.4 Emergency Contact: Tel: 01530 510060 (Office Hours)

IRL ONLY: In the event of emergency, call the National Poisons Information Centre, Beaumont Hospital at 01 809 2166 or 01 837 9964.

2. HAZARDS IDENTIFICATION

2.1 Classification: **Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)**
Eye Dam. 1 H318: Causes serious eye damage

2.2 Label Elements: Contains Single Superphosphate (EC 232-379-5, CAS 65996-95-4)

Signal word: Danger
Hazard statements: H318 Causes serious eye damage.
Precautionary Statements P101 Read label before use
P102 Keep out of reach of children
P103 If medical advice is needed, have product label or container at hand
P280 Wear eye/face protection.
P305/351/338 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.

2.3 Other Hazards: n/a.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s) and Phrases	Precautionary Statements:	Concentration [%]
Calcium bis(dihydrogen orthophosphate)	7758-23-8/ 231-837-1		GHS05 Eye Dam 1 H318: Causes serious eye damage	P280 P305/351/338 P310	>25
Calcium sulphate	7778-18-9/ 231-900-3				>1, C, <10%

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General information: Do not leave affected persons unattended.

Eye contact – Rinse eyes cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison centre or doctor/physician.

Skin contact – Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

Ingestion – Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor. NOTE: Never give an unconscious person anything to drink.

Inhalation – Supply fresh air; consult doctor in case of complaints.

4.2 Most important symptoms and effects, both acute and delayed
Irritating to eyes

4.3 Indication of immediate medical attention and special treatment needed:
No further relevant information available.

5. FIRE FIGHTING MEASURES

The product is not flammable

5.1 Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from substance or mixture:

During heating or in case of fire poisonous gases are produced eg phosphorus and sulphur oxide fumes.

5.3 Advice for firefighters: Wear self-contained breathing apparatus in confined spaces. Wear fully protective suit. Contain contaminated run-off.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Ensure adequate ventilation. Wear a suitable dust mask if dust is generated above exposure limits. Wear eye protection. Wash hands and exposed skin after handling.

6.2 Environmental precautions: Do not allow to enter drains or sewers.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically. Damp down dust with water spray.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information

7. HANDLING & STORAGE

7.1 Precautions for Safe Handling: Prevent formation of dust. Ensure good ventilation/exhaustion at the workplace. The product is not flammable. No special measures required.

7.2 Conditions for Safe Storage: Store in a cool location. Do not store together with alkalis (caustic solutions). Do not store together with urea. Protect from heat and direct sunlight. Protect from humidity and water.

7.3 Specific end use: Fertiliser.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters: Ventilation must be sufficient to maintain TLV-TWA below 3 mg/m³, respirable particles, and 10 mg/m³, inhalable particles [ACGIH recommendation for Particles (Insoluble or poorly soluble). Not Otherwise Specified (PNOS)]

DNELs

Worker
Long-term-systemic effects (inhalation) DNEL: 3.1 mg/m³
Long-term-systemic effects (dermal) DNEL: 17.4 mg/kg bw/day

Consumer
Long-term-systemic effects (inhalation) DNEL: 0.9 mg/m³
Long-term-systemic effects (oral) DNEL: 2.1 mg/kg bw/day
Long-term-systemic effects (dermal) DNEL: 10.4 mg/kg bw/day

PNECs

PNEC aqua (freshwater): 1.7 mg/L
PNEC aqua (marine water): 0.17 mg/L
PNEC aqua (intermittent releases): 17 mg/L
PNEC STP: 10 mg/L

8.2 Exposure Controls:

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals. Do not eat or drink while working. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands: Protective gloves.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material: Protective gloves should be replaced at first sign of wear

Eye protection: Tightly sealed safety glasses.

Body protection: Protective work clothing.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance	light brown/grey powder/granule
Odour	acidic
pH	approx 3.7 at 1% w/w in water
Boiling point	n/a
Melting point	n/a
Flash point	none

Flammability	not flammable
Autoflammability	product is not selfigniting
Explosivity	product does not present an explosion hazard
Oxidising properties	none
Vapour Pressure	8,4x10-7 Pa (OECD 104, EC A.4)
Relative density	2,41 g/cm³ (OECD 109, EC A.3)
Solubility in water	1-100 g/l
n-octanol/water coefficient	Not applicable
Viscosity	Not applicable

9.2 Other information: none

10. STABILITY & REACTIVITY

10.1 Reactivity: reacts with alkali. Mixes with urea to form urea phosphate

10.2 Stability: Stable under normal conditions.

10.3 Possibility of hazardous reactions Decomposes at high temperatures producing toxic fumes.

10.4 Conditions to Avoid: Store away from heat

10.5 Incompatible materials: Alkalis, urea.

10.6 Hazardous Decomposition Products:
Decomposes at high temperatures producing toxic fluorine based pyrolysis products, phosphorus and sulphur oxide fumes.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD/LC50 values that are relevant for classification: No reliable studies. Classification based on read across from analogous substances

Oral LD_{50} diammonium hydrogenorthophosphate 7783-28-0: >2000 mg/kg (rat)
Dermal LD_{50} diammonium hydrogenorthophosphate 7783-28-0: >2000 mg/kg (rat)
Inhalative LC_{50} diammonium hydrogenorthophosphate 7783-28-0: >5000 mg/kg (rat)

Primary irritant effect:

skin: ammonium dihydrogenorthophosphate 7722-76-1: OECD 404: not irritating (rabbit)
eye: superphosphate (SSP) 8011-76-5 OECD 405 EC B5: Irritant effect (rabbit).

Sensitization: diammonium hydrogenorthophosphate 7783-28-0: OECD 429 (LLNA-test); Non sensitising (mouse).

Subacute to chronic toxicity:

Data of the Key Studies for superphosphates, concd 65996-95-4:

Oral NOAEL OECD 422	250 mg/kg/d (rat, 90 days)
Dermal NOAEL	no relevant data available
Inhalative NOAEC	no relevant data available

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
There are no indications of CMR effects.

Mutagenicity: negative (OECD 471, CAS 65996-95-4 Superphosphate concentrated)
negative (OECD 473, CAS 8011-76-5 single superphosphate)
negative (OECD 476, CAS 7722-76-1 ammonium dihydrogenorthophosphate)

Carcinogenicity: no data available (no carcinogenicity study required as this substance is not genotoxic)

Toxicity for reproduction: no classification is necessary
reproductive toxicity: NOAEL : 750 mg/kg bw/day; rat; oral
developmental toxicity: NOAEL: 750 mg/kg bw/day; rat; oral
(OECD 422, CAS 65996-95-4 Superphosphate, concentrated)

12. ECOLOGICAL INFORMATION

12.1 Toxicity: inorganic phosphates are not considered toxic.

ammonium dihydrogenorthophosphate 7722-76-1:	
	LC50 rainbow trout ≥85.9mg/l 96hrs
	NOEL Danio ≥1000mg/l 96hrs
superphosphate (SSP) 8011-76-5	EC50 Daphnia ≥1790mg/l 72hrs
superphosphates, concd 65996-95-4	NOEC algae ≥87.6mg/l 48hrs

12.2 Persistence and degradability: The substance is inorganic; therefore no biodegradation tests are applicable. This product dissociates into Ca+2, sulfate and phosphate ions, which cannot be further degraded.

12.3 Bioaccumulative potential: Does not accumulate in organisms. This substance is highly water soluble and dissociating.

12.4 Mobility in soil: Low potential for adsorption (based on substance properties). This substance is highly water soluble and dissociating.

12.5 Results of PBT and vPvB:	No assessment is required for inorganic substances..
12.6 Other adverse data:	The product should not get in high quantities into waste water because it may act as a plant nutrient and cause eutrophication.

13. DISPOSAL CONSIDERATIONS	Disposal must be made according to official regulations.
13.1 Waste treatment methods:	This product is used as fertiliser. However, large spills can kill vegetation. Prevent large quantities fromentering waterways. If uncontaminated, sweep up or collect, and reuse as product. If contaminated with other materials, collect in suitable containers. On the basis of the necessary technical regulations and after consultation with the disposal agent and the relevant authorities, can be disposed of with domestic waste or incinerated with domestic waste.
European waste catalogue	06 00 00 WASTES FROM INORGANIC CHEMICAL PROCESSES 06 09 00 wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes 06 09 04 calcium-based reaction wastes other than those mentioned in 06 09 03

14. TRANSPORT INFORMATION

14.1 UN-Number	
ADR, IMDG, IATA :	None.
14.2 UN proper shipping name	
ADR, IMDG, lATA:	None.
14.3 Transport hazard class(es)	
ADR, IMDG, lATA	
Class:	None.
14.4 Packaging Group	
ADR, IMDG, lATA:	None.
14.5 Environmental hazards:	No.
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific to this substance:

This substance is classified and labelled in accordance with regulation 453/2010 and the EC Fertiliser Regulations 2003, Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2 Chemical Safety Assessment not undertaken for this material

16. OTHER INFORMATION

Reason for revision:	Replaces version dated Oct 2016. 1.4 Emergency contact amended.
Liability	The product label provides information on the use of the product: do not use otherwise, unless you have assessed any potential hazard involved and the safety measures required. Prepared by VITAX LTD, for Health and Safety purposes from the best knowledge available at the time of printing.