

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**1.1. Product identifier****VITAX Q4 SOLUBLE FOOD****1.2. Relevant identified uses of the substance or mixture and uses advised against**

Identified uses Fertiliser

1.3 Manufacturer/Distributor: Vitax Limited, Owen Street, Coalville LE67 3DE UK

Tel: +44(0) 1530 510060 Email: info@vitax.co.uk

1.4 Emergency Contact: Tel: +44(0) 1530 510060**2. HAZARDS IDENTIFICATION****2.1 Classification:** Not classified as dangerous.**2.2 Label Elements:** n/a.**2.3 Other Hazards:** n/a.**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures:**

INGREDIENT	CAS/EINECS	Classification	% w/w
potassium pentahydrogen bis(phosphate)	14887-42-4 238-961-5	Eye damage 2, H319	<5%

4. FIRST AID MEASURES**4.1 Description of First Aid Measures****Eye contact** – Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.**Skin contact** – immediately wash with soap and water. If skin irritation occurs consult a doctor.**Ingestion** – wash out mouth with water and seek medical advice.**Inhalation** – remove to fresh air.**4.2 Most important symptoms and effects, both acute and delayed****Eye Contact:** pain and redness, burning sensation and tearing.**4.3 Indication of immediate medical attention and special treatment needed:**

Additional medical guidance is available to doctors from the National Poisons Information Service.

5. FIRE FIGHTING MEASURES

Non flammable

5.1 Extinguishing Media: If involved in a fire use water spray or dry powder.**5.2 Special hazards arising from substance or mixture:**

In intense heat, product decomposition will release toxic fumes.

5.3 Advice for firefighters:

Wear self-contained breathing apparatus in confined spaces. Contain contaminated run-off.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal Precautions:** Avoid inhalation of dust and contact with skin and eyes. 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:**

Sweep up carefully to avoid raising dust and transfer to suitable marked container.

7. HANDLING & STORAGE**7.1 Precautions for Safe Handling:** Do not block stack pallets.**7.2 Conditions for Safe Storage:** Store in original containers, tightly closed in a secure, well ventilated, cool but frost-free, dry area. Store clear of foodstuffs and in a separate stack from herbicides.**7.3 Specific end use:** Fertiliser.**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters:** Dust (total inhalable) LTEL 10 mg/m³ (8hr TWA).Dust (respirable) LTEL 4 mg/m³ (8hr TWA).**DNELs potassium pentahydrogen bis(phosphate)**For workers: Long-term-systemic effects (inhalation) DNEL: 4.07 mg/m³

For general population:	Long-term-local effects (inhalation) DNEL: 3.04 mg/m ³
PNECs potassium pentahydrogen bis(phosphate)	
PNEC aqua (freshwater):	0.05 mg/L
PNEC aqua (marine water):	0.005 mg/L
PNEC aqua (intermittent releases):	0.5 mg/L
PNEC STP: 5	0 mg/L
8.2 Exposure Controls:	No specific personal protective equipment assigned. Normal good industrial hygiene practices should be observed.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance	grey powder with black inclusions
Odour	faint characteristic
pH	3.5-4.5
Boiling point	decomposes above 130 deg C
Melting point	not available
Flash point	N/A
Flammability	N/A
Autoflammability	N/A
Explosivity	N/A
Oxidising properties	N/A
Vapour pressure	N/A
Relative density	N/A
Solubility	very soluble

9.2 Other Information:

none

10. STABILITY & REACTIVITY

10.1 Reactivity:	no data
10.2 Stability:	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Reacts with strong alkalis to release ammonia
10.4 Conditions to Avoid:	Store away from heat
10.5 Incompatible materials:	strong oxidising agents, alkalis, nitrates and nitrites.
10.6 Hazardous Decomposition Products:	Decomposes at high temperatures producing toxic nitrogen oxide fumes.

11. TOXICOLOGICAL INFORMATION

Toxicological information on hazardous ingredients:

potassium pentahydrogen bis(phosphate) or related chemicals

Acute toxicity	
Oral LD50	>2000 mg/kg (rat) (OECD 425)
Dermal LD50	>2000 mg/kg (rat) (OECD 402)
Irritation of skin OECD 404	not irritating (rabbit)
Irritation of eyes OECD 405	irritating, cat 2 (rabbit)
Sensitisation OECD 429, EC B.42	no sensitizing effects (mouse) (7558-80-7 sodium dihydrogenorthophosphate)
Skin corrosion/irritation:	Based on available data, the classification criteria are not met.
Serious eye damage/irritation:	Causes serious eye irritation.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Repeated dose toxicity	No reliable study with this product is present. Read-across from analogous substance, 7785-88-8 Sodium aluminum phosphate Oral NOAEL >323 mg/kg bw/day (dog) (90 days, subchronic)
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)	
Germ cell mutagenicity	None
Carcinogenicity:	no data available (no carcinogenicity study required as not genotoxic)
Toxicity for reproduction:	no classification is necessary
7758-11-4 dipotassium hydrogenorthophosphate:	
developmental toxicity: NOAEL	> 1000 mg/kg bw/day; rat, oral (OECD 422)
7778-77-0 potassium dihydrogenorthophosphate :	
developmental / maternal toxicity: NOAEL	> 282 mg/kg bw/day; rat, oral
developmental / maternal toxicity: NOAEL	> 320 mg/kg bw/day; mouse, oral
STOT-single exposure	Based on available data, the classification criteria are not met.

STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met
Toxicological information on product	
Acute toxicity- oral	Not classified has harmful by ingestion. No specific test data are available.
Acute toxicity- dermal	Not classified has harmful by skin contact. No specific test data are available.
Acute toxicity- inhalation	Not classified has harmful by inhalation. Excessive inhalation of respirable particles (up to 10micron) over an extended period may result in silicosis of the lung.
Skin corrosion/irritation	
Human skin model	No specific test data are available.
Serious eye damage/irritation	No specific test data are available.
Respiratory sensitisation	No specific test data are available.
Skin sensitisation	Not determined.
Germ cell mutagenicity	
Genotoxicity - in vitro	This substance has no evidence of mutagenic properties.
Carcinogenicity	No specific test data are available.
Reproductive toxicity	
- fertility	No specific test data are available.
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.
Eye contact	The product is considered to be a low hazard under normal conditions of use. May cause eye irritation.
To the best of our knowledge physical, chemical and toxicological properties have not been fully investigated.	

12. ECOLOGICAL INFORMATION

12.1 Toxicity:	not classified as hazardous. Provides nutrients essential to plant growth.
Aquatic toxicity:	No reliable study with this product is present. Inorganic phosphates are not considered to be toxic to aquatic species.
66922-99-4 Tripotassium trihydrogen diphosphate dihydrate	
EC50/48 h (static)	>100 mg/L (Daphnia magna) (OECD 202, freshwater)
EC50/72 h (static)	>100 mg/L (algae) (OECD 201, freshwater)
LC50/96 h (static)	>100 mg/L (fish <i>Oncorhynchus mykiss</i>) (OECD 203, freshwater)
NOEL: 100 mg/L	
12.2 Persistence and degradability:	The product is inorganic; therefore no biodegradation tests are applicable
12.3 Bioaccumulative potential:	Does not accumulate in organisms
12.4 Mobility in soil:	highly water soluble and dissociating.
12.5 Results of PBT and vPvB:	not classified.
12.6 Other adverse data:	no data

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:	Disposal route should not permit nitrate or phosphate contamination of groundwater. Dispose of waste through a reputable waste disposal contractor in accordance with the Environmental Protection Act 1990.
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14. TRANSPORT INFORMATION

14.1 UN number:	Product is unclassified for transport
14.2 UN proper shipping name:	Product is unclassified for transport
14.3 Transport hazard	Product is unclassified for transport
14.4 Packing group:	Product is unclassified for transport
14.5 Environmental hazards:	Product is unclassified for transport
14.6 Special precautions for user:	Product is unclassified for transport
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Applicable for Maritime bulk transport only. Check with carrier.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific to this substance:	Not classified as dangerous. This substance is classified and labelled in accordance with regulation 1999/45/EC, 1272/2008, the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations 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
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15.2 Chemical Safety Assessment

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.
not undertaken for this substance

16. OTHER INFORMATION

Reason for revision:

Replaces version dated Nov 2014. All sections updated.

Hazard Information not otherwise listed in full elsewhere:

H319: Causes serious eye irritation

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.