SAFETY INFORMATION SHEET

Date of issue: February 2004
Revision date: January 2016

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

1.1 Product Identifier

VITAFEED 102
FRUIT & FLOWER SOLUBLE FEED

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Fertiliser

1.3 Details of the Supplier of the Substance or Mixture

Vitax Limited
Owen Street
Coalville
LE67 3DE Tel: 01530 510060 Email: info@vitax.co.uk

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

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFICATION according to Directive EC 1272/2008 Classification, Labelling and Packaging

This mixture is not classified as dangerous to humans or the environment

Primary Hazard None.

2.2 Label Elements There are no statutory labelling requirements under Directive 1999/45/EC, regulation 1272/2008 and regulation 453/2012.

2.3 Other Hazards Mixture not classed as PBT or vPvB

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Code:

3.2 Mixtures

3.3 Hazardous components

Chemical Name	CAS-No./ EINECS-No.	Annex Index or REACH number	Symbol(s)	R-phrase(s)	Concentrations [%]
Potassium nitrate	7757-79-1/ 231-818-8	REACh no.: 01-2119488224-25	According to 1272/2008: GHS07 	According to 1272/2008: Oxid. Solid 3; H272	55.0 – 65.0
Disodium octaborate	12008-41-2/ 234-541-0	REACh no.: 01-2119490860-33	According to 1272/2008: GHS08 	According to 1272/2008: Repr. 1B H360FD	<0.20

The full hazard information for individual components if not displayed in section 2 or 3 are displayed in Section 16.

4.0. FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 Inhalation Remove from source of exposure to fresh air; seek medical attention.

4.1.2 Skin & Eye exposure Drench immediately with water. Remove any contaminated clothing and launder before re-use. Seek medical attention if symptoms persist or develop.
Eyes: Rinse cautiously for several minutes, Remove contact lenses, if present and easy to do, rinse with clean water for 15 minutes. Seek medical attention if symptoms arise or persist.

4.1.3 Ingestion Do not induce vomiting. Wash out mouth with water and give water to drink. Obtain medical attention if symptoms persist or develop.

4.2 Most important symptoms and effects, both acute and delayed

None known.

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

Information not available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use Foam, carbon dioxide, dry powder, sand. The mixture is not classified as flammable as such extinguishing media should be chosen as appropriate for surrounding materials.

5.2 Special Hazards arising from the substance or mixture

Possible irritant fumes arising from combustion

5.3 Advice for fire-fighters

Cool down containers/equipment exposed to heat with a water spray. Contain spread of extinguishing fluids (these fluids may be hazardous for the environment). Wear complete protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

The following precautions are considered to be good practice when using any chemicals irrespective of their classification unless otherwise specified. Use personal protective equipment -appropriate coveralls and gloves -eye/face protection -appropriate respirator. Avoid contact with skin and eyes

6.2 Environmental Precautions

Do not allow to enter storm drains or water courses. If this product enters a water course or a sewer (including via contaminated soil & vegetation) contact local water authority and inform the Environment Agency

6.3 Methods and material for containment and cleaning up

Sweep avoiding dust into suitably labelled containers. Contact specialist waste disposal contractor.

6.4 Reference to other sections

No reference necessary

7. HANDLING AND STORAGE

7.1 Precaution for safe handling

Avoid contact with skin and eyes. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool dry atmosphere, in original labelled containers. Refer to manufacturer for maximum safe stacking height. Keep away from heat sources, combustible materials.

7.3 Specific end use(s)

No specific information available

8.EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Potassium nitrate:

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	20.8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36.7 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	12.5 mg/kg bodyweight
Long-term - systemic effects, inhalation	10.9 mg/m³
Long-term - systemic effects, dermal	12.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
PNEC aqua (intermittent, freshwater)	4.5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

Disodium octaborate tetrahydrate

DNEL – Workers:	
long-term, inhalation, systemic	= 6.92 mg/m^3 or 1.45 mg B/m3
long-term, dermal, systemic	= 22901 mg/day or 4800 mg B/day.
DNEL - General population:	
DNEL long-term, oral, systemic	= 0.81 mg/kg or 0.17 mg B/kg body weight/day.
DNEL long-term, inhalation, systemic	= 3.48 mg/m^3 or 0.73 mg B/m^3.
DNEL long-term, dermal, systemic	= 164 mg/kg body weight /day or 34.3 mg B/kg body weight /day.
DNEL long-term, oral, local	= 12 mg/m^3 or 2.52mg B/m^3

PNEC:	
PNEC add, water	= 1.35 mg B/L (freshwater and marine water) and 9.1 mg B/L (water with intermittent releases).
PNEC add, sediment	= 1.8 mg B/kg (dry sediment of freshwater and marine sediment).
PNEC soil	= 5.4 mg B/kg soil body weight
PNEC STP (sewage treatment plant)	= 1.75 mg B/L

8.2 Exposure controls

Goggles – Eye Protection: goggles/face shield to BS EN166.
Gloves – BS EN374 – chemical protection.
Respirators – BS approved protection device with P3 filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance;	Colourless or red solid
Odour;	Information not specified
Odour threshold;	Information not specified
pH;	Not applicable.
Melting point/freezing;	Information not specified
Initial boiling point and boiling range; Information not specified	
Flash point;	Information not specified
Evaporation rate;	Information not specified
Flammability (solid, gas);	Information not specified
Upper /lower flammability or explosive limits; Information not specified	
Vapour Pressure;	Information not specified
Vapour density;	Information not specified
Specific gravity;	Not applicable.
Solubility (ies);	Information not specified
Partition coefficient: n-octanol/water; Information not specified	
Auto ignition temperature:	Information not specified
Decomposition temperature:	Information not specified

9.2 Other Information

No other relevant information available

10. STABILITY AND REACTIVITY

10.1 Reactivity	Unknown
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	Information not available
10.4 Conditions to avoid	Extremes of temperature
10.5 Incompatible materials	None Known
10.6 Hazardous decomposition products	Possible Irritant fumes

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects The mixture has not been assessed for toxicological effects, the mixture classification is given in section 2 based on individual component contents. Individual component hazards are given in section 3

Toxicological information on hazardous ingredients:

Potassium nitrate

Acute toxicity:	Not classified (Based on available data, the classification criteria are not met)
LD50 oral rat	3750 mg/kg OECD Guideline 405
LD50 dermal rat	> 5000 mg/kg bw/day OECD Guideline 402
LC50 inhalation rat (mg/l)	> 0,527 mg/l/4h OECD Guideline 403
ATE (oral)	3750 mg/kg
Skin corrosion/irritation:	Not classified (Based on available data, the classification criteria are not met)

pH: 6 - 9 (5 %)
Explanation skin corrosion/irritation: OECD 402: Data obtained by analogy conclusion

Serious eye damage/irritation:	Not classified (Based on available data, the classification criteria are not met)

pH: 6 - 9 (5 %)
Explanation serious eye damage/irritation: OECD Guideline 437/405/EU B.5.

Respiratory or skin sensitisation:	Not classified (Based on available data, the classification criteria are not met)

Explanation respiratory or skin sensitisation: OECD Guideline 429/EU B.42

Germ cell mutagenicity:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity:	Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity:	Not classified (Based on available data, the classification criteria are not met)
Explanation reproductive toxicity	
NOAEL:	1,500 mg/kg/day (general toxicity / reproduction/developmental toxicity)

Specific target organ toxicity (single exposure): Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure): Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard:	Not classified (Based on available data, the classification criteria are not met)

Explanation aspiration hazard: Data lacking
Potential Adverse human health effects and symptoms:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Disodium octaborate:

TOXIC DOSE 1 - LD 50	3450 mg/kg (oral-mouse)
TOXIC DOSE 2 - LD 50	2660 mg/kg (oral rat)
TOXICOLOGICAL INFORMATION	This material is toxic.
INHALATION	Dust may irritate throat and respiratory system and cause coughing.
INGESTION	Irritating. May cause nausea, stomach pain and vomiting.
SKIN CONTACT	May cause skin irritation/eczema.
EYE CONTACT	Irritating and may cause redness and pain.
HEALTH WARNINGS	
INGESTION.	May cause stomach pain or vomiting.
INHALATION.	May cause irritation to the respiratory system.
SKIN CONTACT.	May cause skin irritation/eczema. May cause sensitisation by skin contact.
EYE CONTACT.	Irritating to eyes.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity Not classified as harmful to the environment.

Potassium nitrate:

Ecology - general: Classification concerning the environment: not applicable.
Ecology - water: Mild water pollutant (surface water). Ground water pollutant.

Maximum concentration in drinking water:	50 mg/l (nitrate) (Directive 98/83/EC).
Not harmful to fishes (LC50 (96h)	>1000 mg/l).

Slightly harmful to invertebrates (Daphnia) (EC50 (48h): 100 - 1000 mg/l).
May cause eutrophication. Slightly harmful to plankton (EC50: 100 - 1000 mg/l).

12.2 Persistence and degradability	Information not available
12.3 Bioaccumulative potential	Information not available
12.4 Mobility in soil	Information not available
12.5 Results of PBT and vPvB	Not classified
12.6 Other adverse effects	Information not available

13.DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods Use only licensed waste disposal companies. Do not re-use empty containers for any purpose.

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:	Not specified

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 for the substance or mixture.

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 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. Regulation (EC)
15.2 Chemical Safety Assessment	CSA not undertaken for this substance

16. OTHER INFORMATION

Reasons for revision: Updated in line with Regulation 1272/2008 and Regulation 1907/2006.

Other Hazard Information assigned to individual ingredients, but not carried to final classification:

H272:	May intensify fire; oxidiser.
H360FD:	May damage fertility or the unborn child.

SDS information: This safety data sheet is compiled using data submitted for raw materials and practical experience. This product is intended for professional users only. This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 453/2010.
THE INFORMATION GIVEN HEREIN IS, TO THE BEST OF OUR KNOWLEDGE, CORRECT AND IS PRESENTED IN GOOD FAITH BUT NO WARRANTY, EXPRESSED OR IMPLIED IS GIVEN.