



SAFETY DATA SHEET VERTEX HI-N

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

1.1. Product identifier

Product name VERTEX HI-N
Product number LQF012, LQF013, LQF014

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

Identified uses Fertiliser for use on managed amenity turf

1.3. Details of the supplier of the safety data sheet

Supplier Headland Amenity Ltd
 1 Burr Elm Court
 Main Street
 Caldecote
 Cambridge
 Cambridgeshire
 CB23 7NU
 Tel. +44 (0)1223 491090
 sds.enquiries@headlandamenity.com

Contact person Wendy Johnson

1.4. Emergency telephone number

Emergency telephone +44 (0)1223 491090 (9.00 - 5.00 GMT Mon-Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H315 Causes skin irritation.
 H319 Causes serious eye irritation.

VERTEX HI-N

Precautionary statements	<p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P280 Wear protective gloves, protective clothing and eye protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p>
Supplementary precautionary statements	<p>P321 Specific treatment (see medical advice on this label).</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p>

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

AMMONIUM NITRATE	10-30%
CAS number: 6484-52-2	EC number: 229-347-8
	REACH registration number: 01-2119490981-27-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Ox. Sol. 3 - H272	O; R8. Xi; R36
Eye Irrit. 2 - H319	

MANGANESE DINITRATE	1-5%
CAS number: 10377-66-9	EC number: 233-828-8
	REACH registration number: 01-2119487993-17-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Ox. Sol. 2 - H272	O; R8. Xn; R22, R48/20/21/22. C; R34. R52/53
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
STOT RE 2 - H373	
Aquatic Chronic 3 - H412	

COPPER DINITRATE	<1%
CAS number: 3251-23-8	EC number: 221-838-5
M factor (Acute) = 1	

Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Corr. 1B - H314	C; R34. N; R50, R51/53
Eye Dam. 1 - H318	
Aquatic Acute 1 - H400	
Aquatic Chronic 2 - H411	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

VERTEX HI-N

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if symptoms are severe or persist.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any symptoms develop.
Skin contact	Remove affected person from source of contamination. Take off immediately all contaminated clothing and wash it before reuse. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

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

Inhalation	There may be irritation of the throat with a feeling of tightness in the chest.
Ingestion	There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.
Skin contact	Skin contact may cause redness and irritation.
Eye contact	Irritation and redness, followed by blurred vision. Profuse watering of the eyes. May cause permanent damage.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
Specific treatments	Eye bathing equipment should be available on the premises.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	None known.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Toxic gases or vapours. Oxides of nitrogen.
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5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Contain the spillage using bunding.
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6.3. Methods and material for containment and cleaning up

VERTEX HI-N

Methods for cleaning up Stop leak if safe to do so. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Wash hands thoroughly after handling.

Advice on general occupational hygiene 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

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from frost. Store at temperatures above 5°C. Keep away from heat. Protect from sunlight. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment



Appropriate engineering controls Provide adequate ventilation.

Eye/face protection The following protection should be worn: Chemical splash goggles or face shield. Provide eyewash station.

Hand protection Wear protective gloves. PVC gloves. PVA gloves. Butyl gloves. Nitrile gloves. Rubber gloves.

Other skin and body protection Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. Do not eat, drink or smoke when using this product.

Respiratory protection No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

Environmental exposure controls Refer to specific Member State legislation for requirements under Community environmental legislation.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

VERTEX HI-N

Appearance	Liquid.
Colour	Blue.
Odour	Almost odourless.
Odour threshold	No information available.
pH	pH (concentrated solution): 3.0 - 5.0
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	Mixture not classed as flammable
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.34 - 1.36
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product. Stable under recommended transport or storage conditions.

10.2. Chemical stability

Stability Stable at normal ambient temperatures. Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Avoid heat.

VERTEX HI-N

10.5. Incompatible materials

Materials to avoid Strong acids. Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products In combustion emits toxic fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No information available.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

ATE oral (mg/kg) 5,000.0

Inhalation There may be irritation of the throat with a feeling of tightness in the chest.

Ingestion There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Skin contact Skin contact may cause redness and irritation.

Eye contact There may be irritation and redness. Profuse watering of the eyes.

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulative potential No information available.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility No information available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

VERTEX HI-N

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 453/2010 of 20 May 2010.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 19/05/2016

Revision 3

Supersedes date 04/09/2015

Risk phrases in full R34 Causes burns.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.
R8 Contact with combustible material may cause fire.

VERTEX HI-N

Hazard statements in full

H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.