SAFETY DATA SHEET
PROTEC NPK 16-4-8

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

1.1. Product identifier
Product name
PROTEC NPK 16-4-8
Product number
LQF005/10, LQF005/200

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.
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Precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves, protective clothing and eye protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

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

<table>
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<tr>
<th>POTASSIUM CARBONATE</th>
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<td>CAS number: 584-08-7</td>
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<td>Eye Irrit. 2 - H319</td>
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<tr>
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<tr>
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<td>STOT SE 1 - H370</td>
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<table>
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<td>Classification</td>
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<td>Eye Dam. 1 - H318</td>
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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

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.
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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.

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.

6.2. Environmental precautions
Environmental precautions
Avoid the spillage or runoff entering drains, sewers or watercourses. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up
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.
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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

Occupational exposure limits

ORTHO-PHOSPHORIC ACID

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³
Short-term exposure limit (15-minute): WEL 2 mg/m³
WEL = Workplace Exposure Limit

POTASSIUM CARBONATE (CAS: 584-08-7)

DNEL

Industry - Dermal; Long term local effects: 16 mg/cm²
Industry - Inhalation; Long term local effects: 10 mg/m³
Consumer - Dermal; Long term local effects: 8 mg/cm²
Consumer - Inhalation; Long term local effects: 10 mg/m³

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.

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

Appearance: Liquid.

Colour: Blue.
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Odour threshold  No information available.

pH  pH (concentrated solution): 9.0-10

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  1.21 +/- 0.02

Bulk density  No information available.

Solubility (ies)  No information available.

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  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.

10.5. Incompatible materials

Materials to avoid  Oxidising agents. Strong acids.

10.6. Hazardous decomposition products
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Hazardous decomposition products
Possible irritant fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological effects
No information available.

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. May cause blurred vision and serious eye damage.

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.

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.
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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 Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

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

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments
Revised classification.

Revision date
09/08/2016

Revision
4

Supersedes date
19/05/2016

SDS number
20369

Hazard statements in full
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

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.