SAFETY DATA SHEET
LIQUID TURF HARDENER

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

1.1. Product identifier

Product name: LIQUID TURF HARDENER
Product number: IPH002/10, IPH002/100, IPH002/1000

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: Acute Tox. 4 - H302 Eye Dam. 1 - H318
Environmental hazards: Not Classified

Classification (67/548/EEC or 1999/45/EC): Xn; R22. Xi; R41

2.2. Label elements

Pictogram

Signal word: Danger

Hazard statements: H302 Harmful if swallowed.
H318 Causes serious eye damage.
LIQUID TURF HARDENER

Precautionary statements
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves, protective clothing and eye protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330 Rinse mouth.

Contains
CALCIUM NITRATE

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

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<tr>
<th>CALCIUM NITRATE</th>
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<tr>
<td>CAS number: 15245-12-2</td>
<td>EC number: 239-289-5</td>
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Classification
Acute Tox. 4 - H302
Eye Dam. 1 - H318

Classification (67/548/EEC or 1999/45/EC)
Xn; R22. Xi; R41

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 immediately.

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 symptoms are severe or persist.

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 immediately.

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
Harmful if swallowed.

Skin contact
Skin contact may cause redness and irritation.

Eye contact
Irritation and redness, followed by blurred vision. Profuse watering of the eyes. Causes serious eye damage.

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

Notes for the doctor
No specific recommendations.

Specific treatments
Eye bathing equipment should be available on the premises.
LIQUID TURF HARDENER

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.

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.

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 spillage for reclamation or disposal in sealed containers via a licensed waste contractor. 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: Collect and dispose of spillage as indicated in 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. Avoid contact with metals. Avoid the formation of mists.

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. Keep away from heat. Keep away from combustible materials. Store away from incompatible materials (see Section 10).

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
LIQUID TURF HARDENER

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
Acid-resistant 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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance
Liquid.

Colour
Colourless.

Odour
Not known.

Odour threshold
No information available.

pH
pH (concentrated solution): 0.0-3.0

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
1.35 - 1.45

Bulk density
No information available.

Solubility(ies)
No information available.

Partition coefficient
No information available.

Auto-ignition temperature
No information available.
LIQUID TURF HARDENER

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
May react with metals.

10.2. Chemical stability
Stability
Stable at normal ambient temperatures. Stable under normal conditions.

10.3. Possibility of hazardous reactions
No information available.

10.4. Conditions to avoid
Conditions to avoid
Extreme temperatures.

10.5. Incompatible materials
Materials to avoid
Powdered metal. Metal containers.

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

SECTION 11: Toxicological information

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

Acute toxicity - oral
ATE oral (mg/kg) 1,445.09

Inhalation
Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Ingestion
May cause discomfort if swallowed.

Skin contact
Irritating to skin.

Eye contact
Irritating to 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
LIQUID TURF HARDENER

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.

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
15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

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