



## 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

<b>CALCIUM NITRATE</b>	<b>30-40%</b>
CAS number: 15245-12-2	EC number: 239-289-5
	REACH registration number: 01-2119493947-16-XXXX
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Acute Tox. 4 - H302	Xn; R22. Xi; R41
Eye Dam. 1 - H318	

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.

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<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising.

### 9.2. Other information

<b>Other information</b>	No information required.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	May react with metals.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures. Stable under normal conditions.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	No information available.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Extreme temperatures.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	Powdered metal. Metal containers.
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Possible irritant fumes.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<b>Toxicological effects</b>	No information available.
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#### Acute toxicity - oral

<b>ATE oral (mg/kg)</b>	1,445.09
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<b>Inhalation</b>	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
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<b>Ingestion</b>	May cause discomfort if swallowed.
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<b>Skin contact</b>	Irritating to skin.
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<b>Eye contact</b>	Irritating to eyes.
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## SECTION 12: Ecological Information

<b>Ecotoxicity</b>	Not regarded as dangerous for the environment.
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### 12.1. Toxicity

### 12.2. Persistence and degradability

<b>Persistence and degradability</b>	No information available.
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### 12.3. Bioaccumulative potential

## LIQUID TURF HARDENER

**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.

### 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** 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).

## LIQUID TURF HARDENER

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### SECTION 16: Other information

<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	18/05/2016
<b>Revision</b>	4
<b>Supersedes date</b>	04/09/2015
<b>Risk phrases in full</b>	R22 Harmful if swallowed. R41 Risk of serious damage to eyes.
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H318 Causes serious eye damage.

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.