

# Palintest®

## SAFETY DATA SHEET CALCIUM HARDNESS

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

#### 1.1. Product identifier

|                         |  |
|-------------------------|--|
| Product name            | CALCIUM HARDNESS   |
| Product number          | AD-0776, AS 077, PK 077, AD-0772, SP 129, SP 315, SP 316, SKH 129, SKH 129C, SP 130, SP 129C |
| Internal identification | X-077  |

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

|                 |               |
|-----------------|---------------|
| Identified uses | Testing water |
|-----------------|---------------|

#### 1.3. Details of the supplier of the safety data sheet

|          |  |
|----------|--|
| Supplier | PALINTEST LIMITED<br>PALINTEST HOUSE<br>TEAM VALLEY<br>GATESHEAD<br>TYNE & WEAR NE11 0NS<br>ENGLAND<br>TEL 0191 491 0808<br>FAX 0191 482 5372<br>palintest@palintest.com |
|----------|--|

#### 1.4. Emergency telephone number

|                     |                            |
|---------------------|----------------------------|
| Emergency telephone | +44 (0)207 858 1228 (24hr) |
|---------------------|----------------------------|

National emergency telephone number NHS Direct: 0845 4647 (England and Wales) NHS 24: 08454 24 24 24 (Scotland)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification

|                       |  |
|-----------------------|--|
| Physical hazards      | Not Classified   |
| Health hazards        | Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 |
| Environmental hazards | Not Classified   |

Classification (67/548/EEC or 1999/45/EC) Xn; R22. C; R34

#### 2.2. Label elements

##### Pictogram



## CALCIUM HARDNESS

|   |   |
|---|---|
| <b>Signal word</b>                            | Danger  |
| <b>Hazard statements</b>                      | H302 Harmful if swallowed.<br>H314 Causes severe skin burns and eye damage.   |
| <b>Precautionary statements</b>               | P264 Wash contaminated skin thoroughly after handling.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.<br>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P501 Dispose of contents/container in accordance with local regulations. |
| <b>Contains</b>                               | LITHIUM HYDROXIDE   |
| <b>Supplementary precautionary statements</b> | P260 Do not breathe vapour/spray.<br>P270 Do not eat, drink or smoke when using this product.<br>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.<br>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P321 Specific treatment (see medical advice on this label).<br>P363 Wash contaminated clothing before reuse.<br>P405 Store locked up.  |

### 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

|   |   |  |
|---|---|--|
| <b>MICROCRYSTALLINE CELLULOSE</b> <span style="float: right;"><b>30-60%</b></span>        |   |  |
| CAS number: 9004-34-6   | EC number: 232-674-9  | REACH registration number: N/A                   |
| <b>Classification</b><br>Not Classified   | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>-               |  |
| <b>LITHIUM HYDROXIDE</b> <span style="float: right;"><b>10-30%</b></span>                 |   |  |
| CAS number: 1310-66-3   | EC number: 215-183-4  | REACH registration number: 01-2119560576-31-XXXX |
| <b>Classification</b><br>Acute Tox. 4 - H302<br>Skin Corr. 1B - H314<br>Eye Dam. 1 - H318 | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>Xn; R22. C; R34 |  |
| <b>TALC</b> <span style="float: right;"><b>10-30%</b></span>                              |   |  |
| CAS number: 14807-96-6  | EC number: 238-877-9  | REACH registration number: N/A                   |
| <b>Classification</b><br>Not Classified   | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>-               |  |

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|   |                      |  |                 |
|---|----------------------|--|-----------------|
| <b>ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT HYDRATE</b>   |                      |  | <b>&lt;5.5%</b> |
| CAS number: 194491-31-1   | EC number: 200-573-9 | REACH registration number: 01-2119486762-27-XXXX                     |                 |
| <b>Classification</b><br>Acute Tox. 4 - H302<br>Eye Dam. 1 - H318 |                      | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>Xn; R22. Xi; R41 |                 |

|   |  |  |                 |
|---|--|--|-----------------|
| <b>ETHYLENEDIAMINETETRAACETIC ACID DI SODIUM SALT DIHYDRATE</b>   |  |  | <b>&lt;5.5%</b> |
| CAS number: 6381-92-6   | REACH registration number: 01-2119486775-20-XXXX |  |                 |
| <b>Classification</b><br>Acute Tox. 4 - H302<br>Acute Tox. 4 - H312<br>Acute Tox. 4 - H332<br>Skin Irrit. 2 - H315<br>Eye Irrit. 2 - H319<br>STOT SE 3 - H335<br>Aquatic Chronic 3 - H412 |  | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>Xn; R20/21/22. Xi; R36/37/38. R52/53 |                 |

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

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Unlikely route of exposure as the product does not contain volatile substances.   |
| <b>Ingestion</b>    | Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Get medical attention.  |
| <b>Skin contact</b> | Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.   |
| <b>Eye contact</b>  | Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel. |

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

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | This is unlikely to occur but symptoms similar to those of ingestion may develop. |
| <b>Ingestion</b>    | May cause chemical burns in mouth and throat. May cause stomach pain or vomiting. |
| <b>Skin contact</b> | Burns can occur.  |
| <b>Eye contact</b>  | May cause blurred vision and serious eye damage.                                  |

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

**Notes for the doctor**      Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

**Hazardous combustion products** No known hazardous decomposition products.

### 5.3. Advice for firefighters

**Protective actions during firefighting** No specific firefighting precautions known.

## 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** Not considered to be a significant hazard due to the small quantities used. However, large or frequent spills may have hazardous effects on the environment.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. DO NOT touch spilled material! Absorb in vermiculite, dry sand or earth and place into containers.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Good personal hygiene procedures should be implemented.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry and cool place. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

### 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

#### **MICROCRYSTALLINE CELLULOSE**

Long-term exposure limit (8-hour TWA): WEL 4 mg/m<sup>3</sup> respirable dust  
 Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> inhalable dust  
 Short-term exposure limit (15-minute): WEL 20 mg/m<sup>3</sup> inhalable dust

#### **LITHIUM HYDROXIDE**

Short-term exposure limit (15-minute): WEL 1 mg/m<sup>3</sup>

#### **TALC**

Long-term exposure limit (8-hour TWA): WEL 1 mg/m<sup>3</sup> respirable dust

WEL = Workplace Exposure Limit

**Ingredient comments** WEL = Workplace Exposure Limits

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### 8.2. Exposure controls

#### Protective equipment



|                               |  |
|-------------------------------|--|
| <b>Eye/face protection</b>    | Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. |
| <b>Hand protection</b>        | It is recommended that chemical-resistant, impervious gloves are worn. Wear protective gloves made of the following material: Nitrile rubber.  |
| <b>Hygiene measures</b>       | No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.  |
| <b>Respiratory protection</b> | 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

|                        |                   |
|------------------------|-------------------|
| <b>Appearance</b>      | Solid             |
| <b>Colour</b>          | Pink.             |
| <b>Odour</b>           | Odourless.        |
| <b>Solubility(ies)</b> | Soluble in water. |

#### 9.2. Other information

|                          |                    |
|--------------------------|--------------------|
| <b>Other information</b> | No data available. |
|--------------------------|--------------------|

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

|                   |   |
|-------------------|---|
| <b>Reactivity</b> | There are no known reactivity hazards associated with this product. |
|-------------------|---|

#### 10.2. Chemical stability

|                  |   |
|------------------|---|
| <b>Stability</b> | Stable under the prescribed storage conditions. |
|------------------|---|

#### 10.3. Possibility of hazardous reactions

|   |            |
|---|------------|
| <b>Possibility of hazardous reactions</b> | Not known. |
|---|------------|

#### 10.4. Conditions to avoid

|                            |   |
|----------------------------|---|
| <b>Conditions to avoid</b> | There are no known conditions that are likely to result in a hazardous situation. |
|----------------------------|---|

#### 10.5. Incompatible materials

|                           |  |
|---------------------------|--|
| <b>Materials to avoid</b> | No specific material or group of materials is likely to react with the product to produce a hazardous situation. |
|---------------------------|--|

#### 10.6. Hazardous decomposition products

|   |  |
|---|--|
| <b>Hazardous decomposition products</b> | Heating may generate the following products: Toxic and corrosive gases or vapours. |
|---|--|

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

## CALCIUM HARDNESS

**Toxicological effects** No data available.

### Acute toxicity - oral

**ATE oral (mg/kg)** 1,500.00839438

### Acute toxicity - dermal

**ATE dermal (mg/kg)** 20,518.55997015

### Acute toxicity - inhalation

**ATE inhalation (dusts/mists  
mg/l)** 27.9798545

## SECTION 12: Ecological Information

**Ecotoxicity** Not considered to be a significant hazard due to the small quantities used. However, large or frequent spills may have hazardous effects on the environment.

### 12.1. Toxicity

**Toxicity** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability** No data available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB  
assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## 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

**Road transport notes** The product is not classified as packaged as per ADR 2013 section 3.5.1.4

**Sea transport notes** The product is not classified as packaged as per IMDG 2012 section 3.5.1.4

**Air transport notes** The product is not subject to the requirements of IATA as packaged based upon "De Minimis Quantities" as per IATA Dangerous Goods Regulations (54th edition) subsection 2.6.10.1

### 14.1. UN number

**UN No. (ADR/RID)** 2680

**UN No. (IMDG)** 2680

**UN No. (ICAO)** 2680

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### 14.2. UN proper shipping name

Proper shipping name (ADR/RID) LITHIUM HYDROXIDE

Proper shipping name (IMDG) LITHIUM HYDROXIDE

Proper shipping name (ICAO) LITHIUM HYDROXIDE

Proper shipping name (ADN) LITHIUM HYDROXIDE

### 14.3. Transport hazard class(es)

Not applicable.

ADR/RID class 8

ADR/RID subsidiary risk

ADR/RID label 8

IMDG class 8

IMDG subsidiary risk

ICAO class/division 8

ICAO subsidiary risk

Transport labels



### 14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

EmS F-A, S-B

Emergency Action Code 2X

Hazard Identification Number (ADR/RID) 80

Tunnel restriction code (E)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

**SECTION 15: Regulatory information**

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### 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).

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

### SECTION 16: Other information

|                                  |  |
|----------------------------------|--|
| <b>Issued by</b>                 | L. Morgan  |
| <b>Revision date</b>             | 12/06/2015   |
| <b>Revision</b>                  | 9  |
| <b>Supersedes date</b>           | 27/05/2015   |
| <b>SDS status</b>                | Approved.  |
| <b>Risk phrases in full</b>      | R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.<br>R22 Harmful if swallowed.<br>R34 Causes burns.<br>R36/37/38 Irritating to eyes, respiratory system and skin.<br>R41 Risk of serious damage to eyes.<br>R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.                       |
| <b>Hazard statements in full</b> | H302 Harmful if swallowed.<br>H312 Harmful in contact with skin.<br>H314 Causes severe skin burns and eye damage.<br>H315 Causes skin irritation.<br>H318 Causes serious eye damage.<br>H319 Causes serious eye irritation.<br>H332 Harmful if inhaled.<br>H335 May cause respiratory irritation.<br>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.