



## SAFETY DATA SHEET pH 10 BUFFER TABLETS

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name pH 10 BUFFER TABLETS  
Product No. SK 400, SK 500, SK 600, PT 105/5

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

Identified uses FOR PREPARATION OF BUFFER SOLUTION OF KNOWN pH

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

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

#### 1.4. Emergency telephone number

+44 (0) 191 491 0808 (MON-FRI 08:45-16:45)

### SECTION 2: HAZARDS IDENTIFICATION

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

Classification (1999/45/EEC) Repr. Cat. 2;R60, R61. Xi;R36/38.  
Human health  
See section 11 for additional information on health hazards.

#### 2.2. Label elements

Contains DISODIUM TETRABORATE DECAHYDRATE

Labelling



Toxic

Risk Phrases

R36/38 Irritating to eyes and skin.  
R60 May impair fertility.  
R61 May cause harm to the unborn child.

Safety Phrases

S24/25 Avoid contact with skin and eyes.  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).  
S53 Avoid exposure - obtain special instructions before use.  
S60 This material and its container must be disposed of as hazardous waste.  
P11 Restricted to professional users.

#### 2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

|  |   |
|--|---|
| DISODIUM TETRABORATE DECAHYDRATE   | 30-60%  |
| CAS-No.: 1303-96-4   | EC No.: 215-540-4                                   |
| Classification (EC 1272/2008)<br>Repr. 1B - H360FD                           | Classification (67/548/EEC)<br>Repr. Cat. 2;R60,R61 |
| LITHIUM HYDROXIDE  | 5-10%   |
| CAS-No.: 1310-66-3   | EC No.: 215-183-4                                   |
| Classification (EC 1272/2008)<br>Acute Tox. 4 - H302<br>Skin Corr. 1B - H314 | Classification (67/548/EEC)<br>Xn;R22.<br>C;R34.    |

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

#### Composition Comments

WHEN DISSOLVED IN WATER THE TABLETS PRODUCE A SOLUTION WHOSE pH IS OUTSIDE OF THE RANGE QUOTED FOR 'EXTREME pH' (CLP 3.2.3.3.4.2). THEY ARE NOT CONSIDERED HAZARDOUS FOR TRANSPORT.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### Inhalation

Unlikely route of exposure as the product does not contain volatile substances.

#### Ingestion

Get medical attention immediately!

#### Skin contact

Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

#### Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

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

#### General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### Inhalation

This is unlikely to occur but symptoms similar to those of ingestion may develop.

#### Ingestion

May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

#### Skin contact

May cause serious chemical burns to the skin.

#### Eye contact

May cause blurred vision and serious eye damage.

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

Treat Symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

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

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Hazardous combustion products

When heated, toxic and corrosive vapours/gases may be formed.

## 5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

### 6.2. Environmental precautions

Avoid release to the environment.

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

Absorb in vermiculite, dry sand or earth and place into containers. Wear necessary protective equipment. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

### 6.4. 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

Observe good chemical hygiene practices.

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

Keep in original container. Keep separate from food, feedstuffs, fertilisers and other sensitive material. Store in a cool place. Store in a dry place.

### 7.3. 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

| Name                       | STD | TWA - 8 Hrs |                     | STEL - 15 Min |                      | Notes |
|----------------------------|-----|-------------|---------------------|---------------|----------------------|-------|
| MICROCRYSTALLINE CELLULOSE | WEL |             | 4 mg/m <sup>3</sup> |               | 20 mg/m <sup>3</sup> |       |

WEL = Workplace Exposure Limit.

Ingredient Comments

Due to the hazardous nature of ingredients, exposure should be minimal. WEL = Workplace Exposure Limits

### 8.2. Exposure controls

Protective equipment



Respiratory equipment

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Hand protection

Protective gloves are recommended.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

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## Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash promptly if skin becomes contaminated.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|                          |                          |
|--------------------------|--------------------------|
| Appearance               | Solid                    |
| Colour                   | PEACH                    |
| Odour                    | No characteristic odour. |
| pH-Value, Conc. Solution | 10                       |

### 9.2. Other information

Not known.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under normal temperature conditions.

### 10.3. Possibility of hazardous reactions

Not known.

### 10.4. Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation.

### 10.5. Incompatible materials

Materials To Avoid

No specific, or groups of materials are likely to react to produce a hazardous situation.

### 10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Toxicological information

This material is toxic.

## SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

There are no data on the ecotoxicity of this product. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### 12.1. Toxicity

No data available.

### 12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

### 12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

### 12.4. Mobility in soil

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Mobility:

The product is soluble in water.

## 12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

## 12.6. Other adverse effects

None known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

## SECTION 14: TRANSPORT INFORMATION

|                      |   |
|----------------------|---|
| Road Transport Notes | THE PRODUCT IS NOT CONSIDERED HAZARDOUS FOR SUPPLY OR TRANSPORT AS PACKAGED AS PER ADR 2013 SECTION 3.5.1.4   |
| Sea Transport Notes  | THE PRODUCT IS NOT CONSIDERED HAZARDOUS FOR SUPPLY OR TRANSPORT AS PACKAGED AS PER IMDG 2012 SECTION 3.5.1.4  |
| Air Transport Notes  | THE PRODUCT IS NOT CONSIDERED HAZARDOUS FOR SUPPLY OR TRANSPORT 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/ADN) | 1759 |
| UN No. (IMDG)        | 1759 |
| UN No. (ICAO)        | 1759 |

### 14.2. UN proper shipping name

|                      |   |
|----------------------|---|
| Proper Shipping Name | CORROSIVE SOLID, N.O.S. (LITHIUM HYDROXIDE) |
|----------------------|---|

### 14.3. Transport hazard class(es)

|                     |                                |
|---------------------|--------------------------------|
| ADR/RID/ADN Class   | 8                              |
| ADR/RID/ADN Class   | Class 8: Corrosive substances. |
| ADR Label No.       | 8                              |
| IMDG Class          | 8                              |
| ICAO Class/Division | 8                              |
| Transport Labels    |                                |



### 14.4. Packing group

|                           |     |
|---------------------------|-----|
| ADR/RID/ADN Packing group | III |
| IMDG Packing group        | III |
| ICAO Packing group        | III |

### 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant  
No.

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## **14.6. Special precautions for user**

|                         |          |
|-------------------------|----------|
| EMS                     | F-A, S-B |
| Emergency Action Code   | 2X       |
| Hazard No. (ADR)        | 80       |
| Tunnel Restriction Code | (E)      |

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

Not applicable.

## **SECTION 15: REGULATORY INFORMATION**

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

Water hazard classification

N/A.

### **15.2. Chemical Safety Assessment**

No chemical safety assessment has been carried out.

## **SECTION 16: OTHER INFORMATION**

|                           |   |
|---------------------------|---|
| Issued By                 | L. Morgan                                 |
| Revision Date             | 24/05/2013                                |
| Revision                  | 4   |
| Supersedes date           | 11/04/2013                                |
| Safety Data Sheet Status  | Approved.                                 |
| Risk Phrases In Full      |   |
| R34                       | Causes burns.                             |
| R22                       | Harmful if swallowed.                     |
| R36/38                    | Irritating to eyes and skin.              |
| R61                       | May cause harm to the unborn child.       |
| R60                       | May impair fertility.                     |
| Hazard Statements In Full |   |
| H302                      | Harmful if swallowed.                     |
| H314                      | Causes severe skin burns and eye damage.  |
| H315                      | Causes skin irritation.                   |
| H319                      | Causes serious eye irritation.            |
| H360FD                    | May damage fertility or the unborn child. |

### Disclaimer

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.