Palintest
Water Analysis Technologies

SAFETY DATA SHEET
CALCIUM HARDNESS

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name CALCIUM HARDNESS

Product number AD-0776, SP129, SP130, AS077, PK077, AD-0772, SP315, SP316, SKH129, SKH129C, SP129C, SP315C

UFI UFI: XR20-20QW-F00F-K7S4

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
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

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 (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms

Signal word Danger

CALCIUM HARDNESS

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

MICROCRYSTALLINE CELLULOSE **50-60%**

CAS number: 9004-34-6 | EC number: 232-674-9 | REACH registration number: N/A

Classification
Not Classified

LITHIUM HYDROXIDE **10-20%**

CAS number: 1310-66-3 | EC number: 215-183-4 | REACH registration number: 01-2119560576-31-XXXX

Classification
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Eye Dam. 1 - H318

TALC **10-20%**

CAS number: 14807-96-6 | EC number: 238-877-9 | REACH registration number: N/A

Classification
Not Classified

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ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT HYDRATE	**<5.5%**
CAS number: 194491-31-1	EC number: 200-573-9
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318	

ETHYLENEDIAMINETETRAACETIC ACID DI SODIUM SALT DIHYDRATE		**<5.5%**
CAS number: 6381-92-6	EC number: 613-386-6	REACH registration number: 01-2119486775-20-XXXX
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Aquatic Chronic 3 - H412		

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

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 Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Get medical attention.

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

Eye contact 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

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 Burns can occur.

Eye contact 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

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

5.2. Special hazards arising from the substance or mixture

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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/m³ respirable dust
Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
Short-term exposure limit (15-minute): WEL 20 mg/m³ inhalable dust

LITHIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 1 mg/m³

TALC

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³ respirable dust
WEL = Workplace Exposure Limit.

8.2. Exposure controls

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Protective equipment

Eye/face protection 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.

Hand protection It is recommended that chemical-resistant, impervious gloves are worn. Wear protective gloves made of the following material: Nitrile rubber.

Hygiene measures No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

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 Solid

Colour Pink.

Odour Odourless.

Solubility(ies) Soluble in water.

9.2. Other information

Other information No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not known.

10.4. Conditions to avoid

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 material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products Heating may generate the following products: Toxic and corrosive gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Other health effects Causes severe skin burns and eye damage.

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Acute toxicity - oral

Summary	Harmful if swallowed.
ATE oral (mg/kg)	1,500.00839438

Acute toxicity - dermal

Summary	May be harmful in contact with skin. Causes severe skin burns and eye damage.
ATE dermal (mg/kg)	20,518.55997015

Acute toxicity - inhalation

Summary	May be harmful if inhaled. May cause respiratory irritation.
ATE inhalation (dusts/mists mg/l)	27.9798545

Skin corrosion/irritation

Summary	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Summary	Causes serious eye damage.

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

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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 subsection 2.6.10.1

14.1. UN number

UN No. (ADR/RID) 2680

UN No. (IMDG) 2680

UN No. (ICAO) 2680

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 label 8

IMDG class 8

ICAO class/division 8

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 MARPOL and the IBC Code

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

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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).

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Issued by L. Morgan

Revision date 21/12/2020

Revision 15

Supersedes date 03/07/2018

SDS status Approved.

Hazard statements in full

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.