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

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	<b>1 1 2 2 2 1 1 2 1 1 2</b>
	alcium chloride hydrate (99.999+%-Ca) PURATREM
Item number: 2	0-2060
CAS Number: 22691-02-7	
EC number:	
233-140-8	
1.2 Relevant ide	entified uses of the substance or mixture and uses advised against
No further relev	ant information available.
1.3 Details of th	e supplier of the safety data sheet
Manufacturer/S	
Strem Chemical	,
7 Mulliken Way NEWBURYPOR	
USA	1, MA 01950
info@strem.com	
Further inform	ation obtainable from: Technical Department
1.4 Emergency	telephone number:
EMERGENCY:	CHEMTREC: + 1 (800) 424-9300
During normal	opening times: +1 (978) 499-1600
SECTION 2:	Hazards identification
Classification a	ccording to Regulation (EC) No 1272/2008
GHS0	
GHS0	07 19 Causes serious eye irritation.
Eye Irrit. 2 H3 2.2 Label eleme	07 19 Causes serious eye irritation.
Eye Irrit. 2 H3 2.2 Label eleme Labelling accor	07 19 Causes serious eye irritation. <b>nts</b> <b>ding to Regulation (EC) No 1272/2008</b> s classified and labelled according to the CLP regulation.
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<i>Eye Irrit. 2 H31</i> 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07	97 19 Causes serious eye irritation. nts ding to Regulation (EC) No 1272/2008 s classified and labelled according to the CLP regulation. uns
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GHS0 Eye Irrit. 2 H31 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P101 P102	97 19 Causes serious eye irritation. nts ding to Regulation (EC) No 1272/2008 s classified and labelled according to the CLP regulation. ums trning nts rious eye irritation. tatements If medical advice is needed, have product container or label at hand. Keep out of reach of children.
Eye Irrit. 2 H31 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P101 P102 P103	19 Causes serious eye irritation. 19 Causes serious eye irritation. 19 ding to Regulation (EC) No 1272/2008 19 classified and labelled according to the CLP regulation. 10 ms 10 ms 10 ms 10 ms 11 ms 12 ms 13 ms 14 medical advice is needed, have product container or label at hand. 14 Keep out of reach of children. 15 Read label before use.
GHS0 Eye Irrit. 2 H31 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P101 P102 P103 P262	19 Causes serious eye irritation. nts ding to Regulation (EC) No 1272/2008 s classified and labelled according to the CLP regulation. tms tring nts rious eye irritation. tatements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Do not get in eyes, on skin, or on clothing.
GHS0 Eye Irrit. 2 H31 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P101 P102 P103 P262 P280	19 Causes serious eye irritation. nts ding to Regulation (EC) No 1272/2008 s classified and labelled according to the CLP regulation. ums viring nts rious eye irritation. tatements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection.
GHS0 Eye Irrit. 2 H31 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P101 P102 P103 P262 P280	<ul> <li>Causes serious eye irritation.</li> <li>Causes serious eye irritation.</li> <li>mts ding to Regulation (EC) No 1272/2008 s classified and labelled according to the CLP regulation. ums</li> <li>tring nts rious eye irritation. tatements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lei </li> </ul>
Eye Irrit. 2 H34 Eye Irrit. 2 H34 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P101 P102 P103 P262 P280 P305+P351+P3	<ul> <li><i>P</i> Causes serious eye irritation.</li> <li><i>nts</i></li> <li><i>ding to Regulation (EC) No 1272/2008</i> s classified and labelled according to the CLP regulation.</li> <li><i>trning</i></li> <li><i>nts</i></li> <li><i>nts</i></li> <li><i>rious eye irritation.</i></li> <li><i>tatements</i></li> <li><i>If medical advice is needed, have product container or label at hand.</i></li> <li><i>Keep out of reach of children.</i></li> <li><i>Read label before use.</i></li> <li><i>Do not get in eyes, on skin, or on clothing.</i></li> <li><i>Wear protective gloves/protective clothing/eye protection/face protection.</i></li> <li><i>338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact ler present and easy to do. Continue rinsing.</i></li> <li><i>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</i></li> </ul>
GHS0 Eye Irrit. 2 H31 2.2 Label eleme Labelling accor The substance is Hazard pictogra GHS07 Signal word Wa Hazard stateme H319 Causes se Precautionary s P101 P102 P103 P262 P280	<ul> <li>Causes serious eye irritation.</li> <li>Causes serious eye irritation.</li> <li>ding to Regulation (EC) No 1272/2008 sclassified and labelled according to the CLP regulation.</li> <li>tatms</li> <li>trining nts rious eye irritation.</li> <li>tatements <ul> <li>If medical advice is needed, have product container or label at hand.</li> <li>Keep out of reach of children.</li> <li>Read label before use.</li> <li>Do not get in eyes, on skin, or on clothing.</li> <li>Wear protective gloves/protective clothing/eye protection/face protection.</li> </ul> </li> <li>338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact ler present and easy to do. Continue rinsing.</li> </ul>
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- P403+P233Store in a well-ventilated place. Keep container tightly closed.P501Dispose of contents/container in accordance with local/regional/national/international<br/>regulations.
- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### **SECTION 3: Composition/information on ingredients**

- · 3.1 Chemical characterisation: Substances
- · CAS No. Description
- 22691-02-7 Calcium dichloride hydrate
- · Identification number(s)
- **EC number:** 233-140-8

## **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

## **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

## **SECTION 6:** Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions: No special measures required.
- · 6.3 Methods and material for containment and cleaning up:
- Dispose contaminated material as waste according to item 13.
- · 6.4 Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

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### **SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin.
- · **Respiratory protection:** Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation *Material of gloves* 

- Material of gloves
- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

· 9.1 Information on basic physical and chemical properties

- · General Information
- Appearance:
- Form:

Powder

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		(Contd. of page
Colour:	White	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling range	: Undetermined.	
· Flash point:	0 °C	
· Flammability (solid, gas):	Not determined.	
· Ignition temperature:		
Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Not determined.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure:	Not applicable.	
· Density at 20 •C:	1.71 g/cm <sup>3</sup>	
· Relative density	Not determined.	
· Vapour density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
water at 20 °C:	593 g/l	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	0.0 %	
VOC (EC)	0.00 %	
Solids content:	100.0 %	
<ul> <li>9.2 Other information</li> </ul>	No further relevant information available.	

## SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

• 10.3 Possibility of hazardous reactions No dangerous reactions known.

 $\cdot$  10.4 Conditions to avoid No further relevant information available.

• 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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#### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation
- Causes serious eye irritation.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

### **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- Recommendation
- Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

## **SECTION 14: Transport information**

· 14.1 UN-Number · ADR, ADN, IMDG, IATA

not regulated

· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA

not regulated

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· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	not regulated	
· 14.4 Packing group · ADR, IMDG, IATA	not regulated	
· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
• 14.7 Transport in bulk according to Ann Marpol and the IBC Code	<b>ex II of</b> Not applicable.	
· UN ''Model Regulation'':	not regulated	

### **SECTION 15: Regulatory information**

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department.
- · Contact: Technical Director
- Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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