Safety Data Sheet

According to Regulation (EC) No 1907/2006

D-Pool HCA

Revision: 2025-04-14 **Version:** 01.0

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

1.1 Product identifier

Trade name: D-Pool HCA
Product identifier: calcium hypochlorite, EC number: 231-908-7, CAS number: 7778-54-3

UFI: 0WDJ-2130-300F-UCPN

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

Product use:	Treatment of water used in pools / spas. For professional use only.
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :
AISE_SWED_PW_8a_1
AISE_SWED_PW_8b_1
AISE_SWED_PW_4_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssenbroeksedijk 2, 3542DN Utrecht], The Netherlands

Contact details
Diversey S.P.A.
Strada Statale 235, 26010 Bagnolo Cremasco (CR)
Tel: 039 959 1150, E-mail: info.italy@solenis.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible).
Bergamo - CAV Azienda Ospedaliera Papa Giovanni XXIII, Tel. 800.88.33.00
Firenze - CAV Azienda Ospedaliera “Careggi” U.O. Tossicologia Medica, Tel. (+39) 055.794.7819
Foggia - CAV “Azienda Ospedaliera Università di Foggia”, Tel. 800.183.459
Milano - CAV Ospedale Niguarda, Tel. (+39) 02.66.1010.29
Napoli - CAV “Azienda Ospedaliera A. Cardarelli”, Tel. (+39) 081.545.3333
Pavia - CAV Centro Nazionale di Informazione Tossicologica, Tel. (+39) 0382.24.444
Roma - CAV “Ospedale Pediatrico Bambino Gesù”, Tel. (+39) 06.6859.3726
Roma - CAV Policlinico “A. Gemelli”, Tel. (+39) 06.305.4343
Roma - CAV Policlinico “Umberto I”, Tel. (+39) 06.4997.8000
Verona - CAV Centro antiveleni Veneto, Tel. 800.011.858.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Oxidising solids, Category 2 (H272)
EUH031
Skin corrosion, Category 1B (H314)
Acute toxicity - Oral, Category 4 (H302)
Serious eye damage, Category 1 (H318)
Acute aquatic toxicity, Category 1 (H400)

2.2 Label elements

Signal word: Danger.

Hazard statements:
H272 - May intensify fire; oxidiser.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.

H400 - Very toxic to aquatic life.
EUH031 - Contact with acids liberates toxic gas.

Precautionary statements:
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 - Keep away from clothing and other combustible materials.
P260 - Do not breathe dust.
P280 - Wear protective gloves, protective clothing and eye or face protection.
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.
P310 - Immediately call a POISON CENTRE, doctor or physician.

2.3 Other hazards
No other hazards known.

SECTION 3: Composition/information on ingredients

3.1 Substances

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
calcium hypochlorite	231-908-7	7778-54-3	[6]	Oxidising solids, Category 2 (H272) EUH031 Skin corrosion, Category 1B (H314) Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Acute aquatic toxicity, Category 1 M=10 (H400)		>= 75
calcium hydroxide	215-137-3	1305-62-0	-	Specific target organ toxicity - Single exposure, Category 3 (H335) Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318)		3-10
calcium chloride	233-140-8	10043-52-4	01-2119494219-28	Eye irritation, Category 2 (H319)		3-10

Specific concentration limits
calcium hypochlorite:
• Serious eye damage, Category 1 (H318) >= 3% > Eye irritation, Category 2 (H319) >= 0.5%

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.
For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information: Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician. If skin irritation occurs: Get medical advice or attention.

Eye contact: Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician. Get medical attention or advice if you feel unwell.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause bronchospasm in chlorine sensitive individuals.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
No special hazards known.

5.3 Advice for firefighters
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

6.2 Environmental precautions
Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up
Ensure adequate ventilation. Collect mechanically. Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use non-sparking tools.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advice on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe dust. Do not eat, drink or smoke when using this product. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. Keep away from heat and direct sunlight.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Seveso - Lower Tier requirements (tonnes): 50
Seveso - Upper Tier requirements (tonnes): 200

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	Long term value(s)	Short term value(s)	Ceiling value(s)
calcium hydroxide	1 mg/m³ (ISPESL) 5 mg/m³ (AIDII)		

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
calcium hypochlorite	No data available	No data available	No data available	No data available
calcium hydroxide	No data available	No data available	No data available	No data available
calcium chloride	-	-	-	-

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
calcium hypochlorite	No data available	No data available	No data available	No data available
calcium hydroxide	No data available	No data available	No data available	No data available
calcium chloride	No data available	-	No data available	-

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
calcium hypochlorite	No data available	No data available	No data available	No data available
calcium hydroxide	No data available	No data available	No data available	No data available
calcium chloride	No data available	-	No data available	-

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
calcium hypochlorite	No data available	No data available	No data available	No data available
calcium hydroxide	No data available	No data available	No data available	No data available
calcium chloride	10	-	5	-

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
calcium hypochlorite	No data available	No data available	No data available	No data available
calcium hydroxide	No data available	No data available	No data available	No data available
calcium chloride	5	-	2.5	-

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
calcium hypochlorite	No data available	No data available	No data available	No data available
calcium hydroxide	No data available	No data available	No data available	No data available
calcium chloride	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
calcium hypochlorite	No data available	No data available	No data available	No data available
calcium hydroxide	No data available	No data available	No data available	No data available
calcium chloride	-	-	-	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure	LCS	PROC	Duration (min)	ERC

	description				
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a
Automatic transfer and dilution	AISE_SWED_PW_8b_1	PW	PROC 8b	60	ERC8b

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 16321).

Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN ISO 13982-1).

Respiratory protection: If exposure to dust cannot be avoided use: half mask (EN 140) with particle filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 0.001

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical state: Solid
Appearance: Tablets
Colour: White
Odour: Chlorine
Odour threshold: Not applicable
Melting point/freezing point (°C): Not determined — Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined — Not applicable to solids or gases

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
calcium hypochlorite	No data available		
calcium hydroxide	No data available		
calcium chloride	> 1600	Method not given	1013

Method / remark

Flammability (solid, gas): Not determined
Flammability (liquid): Not applicable.
Flash point (°C): Not applicable.
Sustained combustion: Not applicable.
(UN Manual of Tests and Criteria, section 32, L.2)

Lower and upper explosion limit/flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
pH: Not applicable	
Dilution pH: ≈ 7 (0.001 %)	ISO 4316
Kinematic viscosity: Not determined	Not applicable to solids or gases
Solubility in / Miscibility with water: Soluble	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
calcium hypochlorite	Soluble		
calcium hydroxide	No data available		
calcium chloride	745	Method not given	

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

	Method / remark
Vapour pressure: Not determined	See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
calcium hypochlorite	No data available		
calcium hydroxide	No data available		
calcium chloride	No data available		

	Method / remark
Relative density: Not determined	
Relative vapour density: No data available.	Not applicable to solids
Particle characteristics: Not determined.	Not relevant to classification of this product.

9.2 Other information
9.2.1 Information with regard to physical hazard classes
Explosive properties: Not explosive.
Oxidising properties: May intensify fire; oxidiser.
Corrosion to metals: Not determined — Not applicable to solids or gases

9.2.2 Other safety characteristics
No other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
Keep away from clothing and other combustible materials. Reacts with acids. Reacts with acids releasing toxic chlorine gas.

10.6 Hazardous decomposition products
Chlorine.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Mixture data: .

Relevant calculated ATE(s):
ATE - Oral (mg/kg): 1000

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Oral (mg/kg)
calcium hypochlorite	LD_{50}	850	Rat	Method not given		850
calcium hydroxide		No data available				Not established
calcium chloride	LD_{50}	2301	Rat	OECD 401 (EU B.1)		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
calcium hypochlorite		No data available				Not established
calcium hydroxide		No data available				Not established
calcium chloride	LD_{50}	> 5000	Rabbit	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
calcium hypochlorite		No data available			
calcium hydroxide		No data available			
calcium chloride		No data available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
calcium hypochlorite	Not established	Not established	Not established	Not established
calcium hydroxide	Not established	Not established	Not established	Not established
calcium chloride	Not established	Not established	Not established	Not established

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
calcium hypochlorite	Corrosive	Rabbit		
calcium hydroxide	No data available			
calcium chloride	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
calcium hypochlorite	Severe damage	Rabbit		
calcium hydroxide	No data available			
calcium chloride	Irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
calcium hypochlorite	No data available			
calcium hydroxide	No data available			
calcium chloride	No data available			

Sensitisation
Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
calcium hypochlorite	No data available			
calcium hydroxide	No data available			
calcium chloride	Not sensitising		Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
calcium hypochlorite	No data available			
calcium hydroxide	No data available			
calcium chloride	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
calcium hypochlorite	No data available		No data available	
calcium hydroxide	No data available		No data available	
calcium chloride	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	Read across

Carcinogenicity

Ingredient(s)	Effect
calcium hypochlorite	No data available
calcium hydroxide	No data available
calcium chloride	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
calcium hypochlorite			No data available				
calcium hydroxide			No data available				
calcium chloride			No data available				No evidence for reproductive toxicity

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
calcium hypochlorite		No data available				
calcium hydroxide		No data available				
calcium chloride		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
calcium hypochlorite		No data available				
calcium hydroxide		No data available				
calcium chloride		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
calcium hypochlorite		No data available				
calcium hydroxide		No data available				
calcium chloride		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
calcium hypochlorite			No data available					
calcium hydroxide			No data available					
calcium chloride			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
calcium hypochlorite	No data available
calcium hydroxide	No data available
calcium chloride	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
calcium hypochlorite	No data available
calcium hydroxide	No data available
calcium chloride	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards
11.2.1 Endocrine disrupting properties
Endocrine disrupting properties - Human data, if available:

11.2.2 Other information
No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
calcium hypochlorite	LC_{50}	≥ 0.049-016	*Lepomis macrochirus*	OECD 203, static	96
calcium hydroxide		No data available			
calcium chloride	LC_{50}	4630	*Pimephales promelas*	EPA-OPPTS 850.1075	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
calcium hypochlorite		No data available			
calcium hydroxide		No data available			
calcium chloride	LC_{50}	2400	*Daphnia magna Straus*	OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
calcium hypochlorite		No data available			
calcium hydroxide		No data available			
calcium chloride	EC_{50}	2900	*Pseudokirchneriella subcapitata*	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
calcium hypochlorite		No data available			
calcium hydroxide		No data available			
calcium chloride		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
calcium hypochlorite		No data available			
calcium hydroxide		No data available			
calcium chloride		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
calcium hypochlorite		No data available				
calcium hydroxide		No data available				
calcium chloride		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
calcium hypochlorite		No data available				
calcium hydroxide		No data available				
calcium chloride	EC_{50}	610	*Daphnia magna*	Method not given	21 day(s)	Effects on reproduction

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
calcium hypochlorite		No data available				
calcium hydroxide		No data available				
calcium chloride		No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
calcium hypochlorite					Not applicable (inorganic substance)
calcium hydroxide					Not applicable (inorganic substance)
calcium chloride					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
calcium hypochlorite	No data available			
calcium hydroxide	No data available			
calcium chloride	No data available		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
calcium hypochlorite	No data available				
calcium hydroxide	No data available				
calcium chloride	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
calcium hypochlorite	No data available				
calcium hydroxide	No data available				
calcium chloride	No data available				Potential for mobility in soil, soluble in water

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging Recommendation: Dispose of observing national or local regulations.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number: 3487

14.2 UN proper shipping name:

Calcium hypochlorite, hydrated, corrosive

Calcium hypochlorite, hydrated, corrosive

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 5.1(8)

14.4 Packing group: II

14.5 Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.
14.7 Maritime transport in bulk according to IMO instruments: The product is not transported in bulk tankers.

Other relevant information:
ADR
Classification code: OC2
Tunnel restriction code: (E)
Hazard identification number: 58
IMO/IMDG
EmS: F-H, S-Q

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code
Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

EU regulations:
• Regulation (EC) No. 1907/2006 - REACH
• Regulation (EC) No 1272/2008 - CLP
• substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
• Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
• International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Seveso - Classification: P8 - OXIDISING LIQUIDS AND SOLIDS

15.2 Chemical safety assessment
A chemical safety assessment has been carried out on the substance

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

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Abbreviations and acronyms:
• AISE - The international Association for Soaps, Detergents and Maintenance Products
• ATE - Acute Toxicity Estimate
• DNEL - Derived No Effect Limit
• EC50 - effective concentration, 50%
• ERC - Environmental release categories
• EUH - CLP Specific hazard statement
• LC50 - Lethal Concentration, 50% / Median Lethal Concentration
• LCS - Life cycle stage
• LD50 - Lethal Dose, 50% / Median Lethal dose
• NOAEL - No observed adverse effect level
• NOEL - No observed effect level
• OECD - Organisation for Economic Cooperation and Development
• PBT - Persistent, Bioaccumulative and Toxic
• PNEC - Predicted No Effect Concentration
• PROC - Process categories
• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative
• H272 - May intensify fire; oxidiser.
• H302 - Harmful if swallowed.
• H314 - Causes severe skin burns and eye damage.
• H315 - Causes skin irritation.
• H318 - Causes serious eye damage.
• H319 - Causes serious eye irritation.
• H335 - May cause respiratory irritation.
• H400 - Very toxic to aquatic life.
• EUH031 - Contact with acids liberates toxic gas.

End of Safety Data Sheet