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

1.1 **Product Identifier**

Product Name :	Calcium hypochlorite
Datasheet Number :	SDS010
Unique Formula Identifier:	XV00-X0JH-200C-0RJF

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

Application of the substance / the mixture	PT 2: Disinfectants and algaecides not intended for direct application to humans or animals. PT 3: Veterinary hygiene. PT 4: Food and feed area. PT 5: Drinking water.
Identified Use(s) Uses advised against	No Further relevant information available.

1.3 **Details of the supplier of the safety data sheet**

Name of Supplier	Plastica Ltd
Address of Supplier	Perimeter House, Napier Road St Leonards-on-Sea, East Sussex TN38 9NY, United Kingdom
Telephone	+44 (0) 1424 857857
E-mail (competent person)	info@plasticapools.net

1.4 **Emergency Telephone Number**

Emergency Phone No	0800 043 0891 (Technical) 24 Hours a day 0800 043 0892 (Emergency)
Languages Spoken	English

Members of the public seeking specific information on poisons should contact: I
n England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

SECTION 2 : Hazards Identification

2.1 **Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008



GHS03 **GHS05** **GHS07** **GHS09**

H272	Oxidising solids, Category 2
H302	Acute toxicity (oral), Category 4
H314	Skin corrosion/irritation, Category 1, Sub Category 1B
H318	Serious eye damage/eye irritation, Category 1
H400	Hazardous to the aquatic environment - Acute Hazard, Category 1

Adverse physiochemical, human health and environmental effects
May intensify fire; oxidiser.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Very toxic to aquatic life.

2.2 **Label elements**

Hazard Pictograms	According to Regulation (EC) No. 1272/2008 (CLP) GHS03, GHS05, GHS07, GHS09
Signal Word(s)	Danger
Hazard Statement(s)	H272: May intensify fire; oxidiser. H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H400: Very toxic to aquatic life.
Precautionary Statement(s)	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. P220: Keep away from clothing and other combustible material. P260: Do not breathe dust/fume/gas/mist/vapours/spray. P273: Avoid release to the environment. P280: Wear protective gloves/clothing/eye/face/hearing protection.
EUH Statement(s)	EUH210: Contact with acids liberates toxic gas. EUH071: Corrosive to the respiratory tract.

2.3 **Other hazards**

Other hazards which do not result in classification : No information available.
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII
The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3 : Composition/Information on Ingredients

3.1 Substances

Name	Product Identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium hypochlorite	CAS-No.: 7778-54-3 EC-No.: 231-908-7 EC Index-No.: 017-012-00-7	≥ 65.5	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) EUH031
Impurities			
Sodium chloride	CAS-No.: 7647-14-5 EC-No.: 231-598-3	≤ 18	Not classified
Calcium chloride	CAS-No.: 10043-52-4 EC-No.: 233-140-8 EC Index-No.: 017-013-00-2	≤ 5	Eye Irrit. 2, H319
Calcium chlorate	CAS-No.: 10137-74-3 EC-No.: 233-378-2	≤ 5	Not classified
Calcium hydroxide	CAS-No.: 1305-62-0 EC-No.: 215-137-3	≤ 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

3.1cont..

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Calcium hypochlorite	CAS-No.: 7778-54-3 EC-No.: 231-908-7 EC Index-No.: 017-012-00-7	(0.5 ≤ C < 3) Eye Irrit. 2, H319 (1 ≤ C < 5) Skin Irrit. 2, H315 (3 ≤ C < 5) Eye Dam. 1, H318 (5 ≤ C < 100) Skin Corr. 1B, H314

SECTION 4 : First Aid Measures

4.1 **Description of first aid measures**

General information: Call a doctor immediately.

After inhalation:
Remove person to fresh air and keep comfortable for breathing.
Give oxygen or artificial respiration if necessary.
Call a doctor

After skin contact:
Wash contaminated clothing before reuse.
Rinse skin with water/shower.
Take off immediately all contaminated clothing.
Call a doctor immediately.

After eye contact:
Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing.
Call a doctor immediately.

After swallowing:
Never give anything by mouth to an unconscious person.
Rinse mouth.
Do not induce vomiting.
Call a doctor immediately.
Treat symptomatically and supportively.

4.2 **Most important symptoms and effects, both acute and delayed**

Harmful if swallowed.
Causes severe skin burns and eye damage.
Causes 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 :**

Suitable Extinguishing Agents: Water spray, Dry powder, Foam.
Unsuitable Extinguishing Media: No information available.

5.2 **Special hazards arising from the substance or mixture :**

May intensify fire; oxidiser.
No direct explosion hazard.
Thermal decomposition can lead to the release of irritating gas and vapours.

5.3 **Advice for Firefighters :**

Eliminate all ignition sources if safe to do so.
Wear fully protective suit.
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.

SECTION 6 : Accidental Release Measures

6.1	**Personal precautions, protective equipment and emergency procedures :**	Ventilate spillage area. Do not breathe gas/fumes/vapour/spray. Remove all sources of ignition. Avoid dust formation. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
6.2	**Environmental Precautions:**	Avoid release to the environment.
6.3	**Methods and material for containment and cleaning up:**	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable receptacles. Notify authorities if product enters sewers or public waters.
6.4	**Reference to other sections**	See Section 13 for disposal information.

SECTION 7 : Handling and Storage

7.1	**Precautions for Safe Handling**	Ensure good ventilation of the work station. Do not breathe gas/fumes/vapour/spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
7.2	**Conditions for safe storage, including any incompatibilities** **Storage:**	
	Requirements to be met by storerooms and receptacles:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from food, drink and animal feeding stuffs. Store locked up
	Incompatible materials:	Acids, amines, ammonia, organic substances, acetylene; ammonium chloride; dichloromethyl amine (heat); iron oxides; acetic acid/potassium cyanide; ethanol; urea; glycerin; coal (heat); methanol; nitromethane; sulphur; oil of turpentine; carbon tetrachloride(heat), alkali metals, combustable substances, reducing agents, moisture/water, anthracene; diethylene glycol monomethyl ether; greases; heat; hydroxyl compounds; mercaptans; sodium hydrogensulphate; oils; phenol; hydrochloric acid, organic sulphides, thioles..
7.3	**Specific end use(s)**	No further relevant information available.

SECTION 8 : Exposure Controls/Personal Protection

8.1 Control Parameters

Sodium chloride (7647-14-5)	
Latvia - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	5 mg/m³

Calcium chloride (10043-52-4)	
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	5 mg/m³
Latvia - Occupational Exposure Limits	
OEL TWA	2 mg/m³

Calcium hydroxide (1305-62-0)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Calcium dihydroxide
IOEL TWA	1 mg/m³ (respirable fraction)
IOEL STEL	4 mg/m³ (respirable fraction)
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	1 mg/m³ (inhalable fraction)
MAK (OEL STEL)	4 mg/m³ (inhalable fraction)
Belgium - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (alveolar fraction)
OEL STEL	4 mg/m³
Bulgaria - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	1 mg/m³ (respirable dust, inhalable fraction)
KGVI (OEL STEL)	4 mg/m³ (respirable dust; inhalable fraction)
Cyprus - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	1 mg/m³ (respirable fraction of aerosol)
Denmark - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction) 5 mg/m³
OEL STEL	4 mg/m³ (respirable fraction) 10 mg/m³

8.1 cont..

Calcium hydroxide (1305-62-0)	
Estonia - Occupational Exposure Limits	
OEL TWA	1 mg/m³
OEL STEL	4 mg/m³
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	1 mg/m³
HTP (OEL STEL)	4 mg/m³
France - Occupational Exposure Limits	
VME (OEL TWA)	1 mg/m³ (indicative limit-alveolar fraction)
VLE (OEL C/STEL)	4 mg/m³ (indicative limit-alveolar fraction)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	1 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Gibraltar - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Greece - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	1 mg/m³ (respirable fraction)
CK (OEL STEL)	4 mg/m³ (respirable fraction)
Ireland - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable dust)
OEL STEL	4 mg/m³ (respirable dust)
Italy - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction)
Latvia - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction)

8.1 cont..

Calcium hydroxide (1305-62-0)	
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	1 mg/m³ (respirable fraction)
TPRV (OEL STEL)	4 mg/m³ (respirable fraction)
OEL chemical category	Skin notation respirable fraction
Luxembourg - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (alveolar fraction)
OEL STEL	4 mg/m³ (alveolar fraction)
Malta - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	1 mg/m³ (respirable fraction)
TGG-15min (OEL STEL)	4 mg/m³ (respirable dust)
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	2 mg/m³ (inhalable fraction) 1 mg/m³ (respirable fraction)
NDSCh (OEL STEL)	4 mg/m³ (respirable fraction) 6 mg/m³ (inhalable fraction)
Portugal - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (indicative limit value-breathable fraction)
OEL STEL	4 mg/m³ (indicative limit value-breathable fraction)
Romania - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (for gaseous or vapor phase chemicals, the limit value is expressed at 20°C and 101.3 kPa-respirable fraction)
OEL STEL	4 mg/m³ (for gaseous or vapor phase chemicals, the limit value is expressed at 20°C and 101.3 kPa-respirable fraction)
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	5 mg/m³ (respirable fraction)

8.1 cont..

Calcium hydroxide (1305-62-0)	
Slovenia - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	1 mg/m³ (respirable fraction)
VLA-EC (OEL STEL)	4 mg/m³ (respirable fraction)
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	1 mg/m³ (respirable fraction)
KGV (OEL STEL)	4 mg/m³ (respirable fraction)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	1 mg/m³ (respirable fraction) 5 mg/m³
WEL STEL (OEL STEL)	4 mg/m³ (respirable fraction) 15 mg/m³ (calculated)
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	1 mg/m³ (respirable dust)
Korttidsverdi (OEL STEL)	4 mg/m³ (value from the regulation-respirable dust)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	1 mg/m³ (inhalable dust)
KZGW (OEL STEL)	4 mg/m³ (inhalable dust)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m³

8.2 **Exposure controls**

Personal protective equipment:
General protective and hygienic measures:

The usual precaultionary measures are to be adhered to when handling chemicals.
Do not eat or drink while working.
Take note of assigned Workplace Exposure Limits.

Respiratory protection:

In an emergency (e.g.: unintentional release of the substance) respiratory protection must be worn.
Consider the maximum period for wear.
Respiratory protection: Combination filter B - P2, colour code grey-white.
Use insulating device for concentrations above the usage limits for filter devices, for oxygen concentrations below 17% volume, or in circumstances which are unclear..

8.2 cont..

Protection of hands: Protective gloves

Use protective gloves. The glove material must be sufficiently impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location. Pay attention to skin care.
Skin protection creams do not protect sufficiently against the substance.
Textile or leather gloves are completely unsuitable.
The following information is valid for aqueous, saturated solutions of the salt.
The following materials are suitable for protective gloves (Permeation time >= 8 hours):
Natural rubber/Natural latex - NR (0,5 mm) (use non-powdered and allergen free products)
Polychloroprene - CR (0,5 mm)
Nitrile rubber/Nitrile latex - NBR (0,35 mm)
Butyl rubber - Butyl (0,5 mm)
Fluoro carbon rubber - FKM (0,4 mm)
Polyvinyl chloride - PVC (0,5 mm)
The times listed are suggested by measurements taken at 22 °C and constant contact.
Temperatures raised by warmed substances, body heat, etc.
and a weakening of the effective layer thickness caused by expansion can lead to a significantly shorter breakthrough time. In case of doubt contact the gloves' manufacturer. A 1.5-times increase / decrease in the layer thickness doubles / halves the breakthrough time. This data only applies to the pure substance. Transferred to mixtures of substances, these figures should only be taken as an aid to orientation

Eye Protection
Sufficient eye protection must be worn.
Wear chemical safety goggles.
If the face is at risk a protective shield must also be worn..

Body protection:
Protective work clothing.
Body protection must be chosen depending on product properties, activity and possible exposure.

SECTION 9 : Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

General Information	
Appearance:	
Form:	Solid, small chips of different dimensions
Colour:	White
Odour:	Characteristic smell of bleach, lightly pungent
Odour threshold:	Not available
Melting point:	204.4 °C
Freezing point:	Not applicable
Boiling point:	Not available
Flammability:	Non flammable
Explosive properties:	Not explosive
Oxidising properties:	May cause or intensify fire; oxidiser.
Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable
Flash point:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	Not available
pH:	11.72 (solution)
pH solution:	Not available
Viscosity, kinematic:	Not applicable

9.1 cont..

Solubility:	Insoluble in water.
Water:	243.6 g/l
Partition coefficient n-octanol/water (Log Kow):	-0.87
Vapour pressure:	Not available
Vapour pressure at 50°C:	Not available
Density:	0.9 g/cm³
Relative density:	0.9
Relative vapour density at 20°C:	Not applicable
Particle size:	Not available

9.2 **Other Information:** No additional information available.

SECTION 10 : Stability and Reactivity

10.1 **Reactivity** May intensify fire; oxidiser..

10.2 **Chemical stability:** Stable under normal conditions.

10.3 **Possibility of hazardous reactions:** May intensify fire. Contact with acids liberates toxic gas.

Risk of explosion in contact with: amines, ammonia, organic substances, acetylene; ammonium chloride; dichloromethylamine (heat); iron oxides; acetic acid/potassium cyanide; ethanol; urea; glycerin; coal (heat); methanol; nitromethane; sulphur; oil of turpentine; carbon tetrachloride (heat)
Calcium hypochlorite can react dangerously with: alkali metals, combustable substances, reducing agents, moisture/water, water, anthracene; diethylene glycol monomethyl ether; greases; heat; hydroxyl compounds; mercaptans; sodium hydrogensulphate; oils; phenol; hydrochloric acid, organic sulphides, thioles.

10.4 **Conditions to avoid:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with Incompatible materials.

10.5 **Incompatible materials:** Acids, amines, ammonia, organic substances, acetylene; ammonium chloride; dichloromethyl amine (heat); iron oxides; acetic acid/potassium cyanide; ethanol; urea; glycerin; coal (heat); methanol; nitromethane; sulphur; oil of turpentine; carbon tetrachloride (heat), alkali metals, combustable substances, reducing agents, moisture/water, water, anthracene; diethylene glycol monomethyl ether; greases; heat; hydroxyl compounds; mercaptans; sodium hydrogensulphate; oils; phenol; hydrochloric acid, organic sulphides, thioles..

10.6 **Hazardous decomposition products:** Thermal decomposition can lead to release of irritating and toxic gases and vapors.

SECTION 11 : Toxicological Information

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

Acute toxicity (oral): Harmful if swallowed.
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified

Calcium hypochlorite (7778-54-3)	
LD50 oral rat	850 mg/kg (Source: JAPAN_GHS)
LD50 dermal rabbit	> 2000 mg/kg (Source: JAPAN_GHS)
Sodium chloride (7647-14-5)	
LD50 oral rat	3550 mg/kg (Source: ECHA)
LD50 dermal rabbit	> 10000 mg/kg (Source: ECHA)
LC50 Inhalation - Rat	> 42 mg/l (Exposure time: 1 h Source: ECHA_API)
Calcium chloride (10043-52-4)	
LD50 oral rat	1000 mg/kg (Source: OECD_SIDS)
LD50 dermal rabbit	> 5000 mg/kg (Source: OECD_SIDS)
Calcium chlorate (10137-74-3)	
LD50 oral rat	4500 mg/kg (Source: NLM_HSDB)
Calcium hydroxide (1305-62-0)	
LD50 oral rat	> 2000 mg/kg (Source: ECHA)
LD50 dermal rat	> 2500 mg/kg (Source: ECHA_API)
LC50 Inhalation - Rat	> 6.04 mg/l/4h

Skin corrosion/irritation: Causes severe skin burns.
pH: 11.72 (solution)
Serious eye damage/irritation: Causes serious eye damage.
pH: 1 1.72 (solution)
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

Calcium hypochlorite (7778-54-3)	
IARC group	3 - Not classifiable

Reproductive toxicity: Not classified
STOT-single exposure: Not classified
STOT-repeated exposure: Not classified
Aspiration hazard: Not classified

11.2 Information on other hazards

Adverse health effects caused by endocrine disrupting properties:
The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 12 : Ecological Information

12.1 **Toxicity**

Ecology - general: Very toxic to aquatic life.
Hazardous to the aquatic environment, short–term (acute): Very toxic to aquatic life.
Hazardous to the aquatic environment, long–term (chronic): Not classified

Calcium hypochlorite (7778-54-3)	
LC50 - Fish [1]	0.049 – 0.16 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: IUCLID)
LC50 - Fish [2]	0.4 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through] Source: EPA)
Sodium chloride (7647-14-5)	
LC50 - Fish [1]	5560 – 6080 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through] Source: EPA)
LC50 - Fish [2]	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
EC50 - Crustacea [1]	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 - Crustacea [2]	340.7 – 469.2 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Calcium chloride (10043-52-4)	
LC50 - Fish [1]	10650 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 - Crustacea [1]	2280000 – 3948000 µg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2 **Persistence and degradability** No additional information available.

12.3 **Bioaccumulative potential** Product is not expected to bioaccumulate.

Calcium hypochlorite	
Partition coefficient n-octanol/water (Log Kow)	-0.87

12.4 **Mobility in soil** No further relevant information available.

12.5 **Results of PBT and vPvB assessment**

PBT: This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

vPvB: This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6 **Adverse effects on the environment caused by endocrine disrupting properties**

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7 **Other adverse effects** No additional information available.

SECTION 13 : Disposal Considerations

13.1 **Waste treatment methods:** Dispose of contents/container in accordance with licensed collector's sorting instructions.

Products/Packaging disposal recommendations: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14 : Transport Information

14.1 **UN-Number**
ADR, ADN, IMDG, IATA UN3487

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

ADR	IMDG	IATA	ADN
CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE	CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE	Calcium hypochlorite, hydrated mixture, corrosive	CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE
Transport document description			
UN 3487 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE, 5.1 (8), II, (E), ENVIRONMENTALLY HAZARDOUS	UN 3487 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE, 5.1 (8), II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 3487 Calcium hypochlorite, hydrated mixture, corrosive, 5.1 (8), II, ENVIRONMENTALLY HAZARDOUS	UN 3487 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, CORROSIVE, 5.1 (8), II, ENVIRONMENTALLY HAZARDOUS

14.3 **Transport hazard class(es)**
ADR, ADN, IMDG, IATA
Class

5.1 (8)	5.1 (8)	5.1 (8)	5.1 (8)
			

14.4 **Packing group**
ADR, ADN, IMDG, IATA II

14.5 **Environmental Hazards** Dangerous for the environment, Marine pollutant

14.6 **Special precautions for user**
Overland transport

Classification code (ADR):	OC2
Special provisions (ADR):	314, 322
Limited quantities (ADR):	1kg
Excepted quantities (ADR):	E2
Packing instructions (ADR):	P002, IBC08
Special packing provisions (ADR):	B4, B13
Mixed packing provisions (ADR):	MP2
Tank code (ADR):	SGAN

14.6 cont..

Tank special provisions (ADR):	TU3
Vehicle for tank carriage:	AT
Transport category (ADR):	2
Special provisions for carriage - Packages (ADR):	V11
Special provisions for carriage - Loading, unloading and handling (ADR):	CV24, CV35
Hazard identification number (Kemler No.):	58
Orange plates:	
Tunnel restriction code (ADR):	E
EAC code:	1W

Transport by sea

Special provisions (IMDG):	314, 322
Limited quantities (IMDG):	1 kg
Excepted quantities (IMDG):	E2
Packing instructions (IMDG):	P002
Special packing provisions (IMDG):	PP85
EmS-No. (Fire):	F-H
EmS-No. (Spillage):	S-Q
Stowage category (IMDG):	D
Stowage and handling (IMDG):	SW1, SW11
Segregation (IMDG):	SGG8, SG35, SG38, SG49, SG53, SG60
Properties and observations (IMDG):	White or yellowish corrosive solid (powder, granules or tablets) with chlorine-like odour.

Soluble in water. May cause fire in contact with organic material or ammonium compounds. Substances are liable to exothermic decomposition at elevated temperatures. This condition may lead to fire or explosion. Decomposition can be initiated by heat or by impurities (e.g., powdered metals (iron, manganese, cobalt, magnesium) and their compounds). Liable to heat slowly. Reacts with acids, evolving chlorine, an irritating, corrosive and toxic gas. In the presence of moisture, corrosive to most metals. Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA):	E2
PCA Limited quantities (IATA):	Y544
PCA limited quantity max net quantity (IATA):	2.5kg
PCA packing instructions (IATA):	558
PCA max net quantity (IATA):	5kg
CAO packing instructions (IATA):	562
CAO max net quantity (IATA):	25kg
Special provisions (IATA):	A8, A136, A803
ERG code (IATA):	5C

Inland waterway transport

Classification code (ADN):	OC2
Special provisions (ADN):	314, 322
Limited quantities (ADN):	1 kg
Excepted quantities (ADN):	E2
Equipment required (ADN):	PP
Number of blue cones/lights (ADN):	0

14.6 cont..

Rail transport

Classification code (RID):	OC2
Special provisions (RID):	314, 322
Limited quantities (RID):	1kg
Excepted quantities (RID):	E2
Packing instructions (RID):	P002, IBC08
Special packing provisions (RID):	B4, B13
Mixed packing provisions (RID):	MP2
Tank codes for RID tanks (RID):	SGAN
Special provisions for RID tanks (RID):	TU3
Transport category (RID):	2
Special provisions for carriage – Packages (RID):	W11
Special provisions for carriage - Loading, unloading and handling (RID):	CW24, CW35
Colis express (express parcels) (RID):	CE10
Hazard identification number (RID):	58

14.7 **Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable

SECTION 15 : Regulatory Information

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

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): Calcium chlorate (10137-74-3)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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.

Abbreviations and acronyms:

ADN: European agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
ATE: Acute Toxicity Estimate
BCF: Bioconcentration factor
BLV: Biological limit value
BOD: Biochemical oxygen demand (BOD)
COD: Chemical oxygen demand (COD)
DMEL: Derived Minimal Effect level
DNEL: Derived-No Effect level
Ec-No: European community number
EC50: Median effective concentration
EN: European Standard
IARC: International Air Transport Association
IMDG: Interational Maritime Dangerous Goods
LC50: Median lethal concentration
LD50: Median lethal dose
LOAEL: Lowest Observed Adverse Effect Level
NOEC: No-Observed Effect Concentration
OECD: Organisation for Economic Co-Operation and Development
OEL: Occupational Ecposure Limit
PBT: Persistent Bioaccumulative Toxic
PNEC: Predicted No-Effect Concentration
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS: Safety Data Sheet
STP: Sewage treatment plant
ThOD: Theoretical oxygen demand
TLM: Median Tolerance Limit
VOC: Volatile Organic Compunds
CAS-No: Chemical Abstrat Service number
N.O.S: Not Otherwise Specified
vPvB: Very Persistent and Very Bioaccumulative
ED: Endocrine disrupting properties