

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 6/2/2017

Revision date: Jan.12, 2019

Version: 1.0

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

#### 1.1. Product identifier

Product form : Substance  
Trade name : CALCIUM HYPOCHLORITE, HYDRATED 2880

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

##### 1.2.1. Relevant identified uses

Main use category : Algicide, bactericide, deodorant, potable water purification, disinfectant for swimming pools, fungicide, bleaching agent (paper, textiles).

##### 1.2.2. Uses advised against

Restrictions on use : No information available

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

##### Manufacturer

Richina Development Ltd.  
Add: Room 601, Silvercord, Tower 2, 30 Canton Road, TsT, Kowloon., Hong Kong  
Tel : 852-2375 6288  
Zip: 027666

##### Importer

#### 1.4. Emergency telephone number

Emergency number : +86-021-68406551

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

May intensify fire; oxidizer. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life.

#### 2.2. Label elements

##### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS03



GHS05



GHS07



GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H272 - May intensify fire; oxidizer  
H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H400 - Very toxic to aquatic life

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
P264 - Wash hands, forearms and face thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 2.3. Other hazards

Other hazards not contributing to the classification : No information available.

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Name : CALCIUM HYPOCHLORITE, HYDRATED 2880

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	> 65.0	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400
Sodium chloride	(CAS No) 7647-14-5 (EC-No.) 231-598-3	< 25.0	Not classified
Water	(CAS No) 7732-18-5 (EC-No.) 231-791-2	< 10.0	Not classified
Calcium chloride	(CAS No) 10043-52-4 (EC-No.) 233-140-8 (EC index no) 017-013-00-2	< 6.0	Eye Irrit. 2, H319
Calcium hydroxide	(CAS No) 1305-62-0 (EC-No.) 215-137-3	< 6.0	Skin Irrit. 2 H315 Eye Dam. 1 H318 STOT SE 3 H335
Carbonic acid, calcium salt (1:1)	(CAS No) 471-34-1 (EC-No.) 207-439-9	< 4.0	Not classified

#### 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 ( C >= 5) Skin Corr. 1B, H314

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.  
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Neutral saline solution may be used as soon as it is available. Do NOT interrupt flushing. Take care not to rinse contaminated water into the non-affected eye or onto the face. Call a physician immediately.  
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact : Burns.  
Symptoms/effects after eye contact : Serious damage to eyes.  
Symptoms/effects after ingestion : Burns.

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

Treat symptomatically based on individual reactions of patient and judgement of doctor. Effects may be delayed. May cause corneal burns.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Flood fire area with water from a distance.  
Unsuitable extinguishing media : dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Foam.

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

Fire hazard : Powerful oxidizing solid. Will accelerate burning when involved in a fire. This strong oxidiser may cause a fire as it contacts with combustible materials.  
Explosion hazard : Containers may explode when heated.

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

Hazardous decomposition products in case of fire : When involved in a fire, this product may generate irritating and highly toxic gases of hydrogen chloride gas, hydrochloric acid, calcium oxides, calcium chlorate, calcium hydroxide, calcium carbonate, and chlorine, oxygen gas, and dichlorine monoxide above 158°C.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.

Measures in case of dust release : Clean up immediately by sweeping or vacuum. Transfer the product into a spare container: - suitably labeled.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. 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/vapors/spray. Do not inhale product dust/fumes. Do NOT allow product to get damp. Do NOT mix with other chemicals. Do NOT add water to the product - add the product to the water. Use only clean utensils for handling as remnants of other products may cause a violent reaction leading to fire or explosion.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store locked up. Store in a well-ventilated place. Protect from moisture. Keep cool. Protect from sunlight. Keep away from food, drink and animal feeding stuffs.

Incompatible materials : Combustible materials.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Sodium chloride (7647-14-5)		
Latvia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Lithuania	IPRV (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Calcium chloride (10043-52-4)		
Czech Republic	Exposure limits (PEL) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Latvia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Calcium hydroxide (1305-62-0)		
EU	IOELV TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (existing scientific data on health effects appear to be particularly limited)
Austria	MAK (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction)
Austria	MAK Short time value (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup> (inhalable fraction)
Belgium	Limit value (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

<b>Calcium hydroxide (1305-62-0)</b>		
Croatia	GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Cyprus	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Czech Republic	Exposure limits (PEL) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Denmark	Limit (long-term) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Estonia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
France	VME (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Gibraltar	Eight hours mg/m <sup>3</sup>	5 mg/m <sup>3</sup> (existing scientific data on health effects appear to be particularly limited)
Greece	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Hungary	Exposure Limit Value	5 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (calculated)
Latvia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Lithuania	IPRV (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Luxembourg	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Malta	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Poland	NDS (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (inhalable fraction) 1 mg/m <sup>3</sup> (respirable fraction)
Poland	NDSch (mg/m <sup>3</sup> )	4 mg/m <sup>3</sup> (respirable fraction) 6 mg/m <sup>3</sup> (inhalable fraction)
Portugal	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (indicative limit value)
Romania	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Slovakia	NPHV (priemerná) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Slovenia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable fraction)
Spain	VLA-ED (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (inhalable dust)
Sweden	kortidsvärde (KTV) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> (inhalable dust)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (calculated)
Norway	TWA (AN) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Norway	TWA (Kortidsverdi) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (value calculated)
Switzerland	MAK (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (inhalable dust)
Turkey	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Australia	TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Canada (Quebec)	VEMP (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA - ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA - NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA - OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction)
<b>Carbonic acid, calcium salt (1:1) (471-34-1)</b>		
France	VME (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Latvia	OEL TWA (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
Poland	NDS (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (<2% free crystalline silica-inhalable fraction)
Portugal	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulate matter containing no Asbestos and <1% Crystalline silica)
Switzerland	MAK (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable dust)
Australia	TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (containing no asbestos and <1% crystalline silica-inhalable dust)
Canada (Quebec)	VEMP (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust)

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

### Carbonic acid, calcium salt (1:1) (471-34-1)

USA - NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable dust)
-------------	--------------------------------------	--

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	:	White to Gray Powder or Crystalline Granule
Appearance	:	Power.
Color	:	White to Gray
Odor	:	Strong Chlorine Odour
Odor threshold	:	1-3ppm (Value for chlorine)
pH	:	10.8 (10% Solution)
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	slowly decomposed less than 100 °C; when above 140 °C, around 12 minutes of heating up, violent decomposition and combustion occur
SADT (Self Accelerated Decomposition Temperature):	:	60 °C < SADT ≤ 75 °C
CAT (Critical Ambient Temperature)	:	55 °C
Flammability (solid, gas)	:	Non flammable
Relative vapor density at 20 °C	:	6.9
Relative density	:	2.00 (20°C) (Water = 1)
Solubility	:	21g/100mL (25°C) ; 43-48g/100ml (40°C) ; Insoluble in ethanol
Log Pow	:	-2.46
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	Fire accelerant
Explosion limits	:	Not applicable
Particle Size	:	Granular (0.3-2mm) or tablet (7-300g) or Customized.
Refractive Index	:	1.545 (alpha), 1.69 (beta)
Bulk Density	:	1.0g/cm <sup>3</sup> (loose granules)
Moisture content	:	5.5-10%
Molecular Weight	:	142.98

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

May intensify fire; oxidizer.

### 10.2. Chemical stability

Stable under normal conditions. May decompose violently if exposed to heat or direct sunlight. All hypochlorite solutions are unstable and slowly decompose on contact with air, especially if acidified, or contaminated. Decomposition may lead to spontaneous ignition through self-heating.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous Polymerisation will not occur, however this product is a highly reactive oxidising chlorine compound. May cause fire or explosion. Readily ignites with flammable and combustible materials, in contact with anhydrous (dry) calcium hypochlorite. Reacts with ammonia, primary amines, aromatic amines, and urea to form explosive nitrogen trichloride. May explode upon contact with ethanol or methanol, due to the formation of the alkyl hypo-chlorites. Contact with hydroxy compounds causes ignition and may be explosive. Contact of acetylene may lead to formation of explosive chloroacetylenes. Reaction with acetic acid and potassium cyanide may be explosive. Reaction with reducing agents causes a violent reaction. Reaction with metal oxides can cause a violent oxygen-evolving decomposition of hypochlorites. A confined intimate mixture of calcium hypochlorite + finely divided charcoal exploded on heating. Metals catalyze the decomposition. Reaction with organic sulfur compounds may cause a flash fire/explosion. A mixture of damp sulfur and 'solid swimming pool chlorine' caused a violent exothermic reaction. May explode with turpentine.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Combustible materials. Incompatible with flammable, organic and combustible materials, ammonia, primary amines, aromatic amines, and urea acids, ammonium chloride, different types of chlorinating chemicals, ethanol or methanol, hydroxy compounds, acetylene, acetic acid and potassium cyanide, reducing agents, metal oxides, charcoal + heat, metals, organic sulfur, compounds, sulfur (damp), turpentine and all sources of ignition.

### 10.6. Hazardous decomposition products

In a fire, this product may generate irritating and highly toxic gases of hydrogen chloride gas, hydrochloric acid, calcium oxides, calcium chlorate, calcium hydroxide, calcium carbonate, and chlorine, oxygen gas, and dichlorine monoxide above 177 °C. In contact with incompatible materials, the formation of extremely hazardous gases such as explosively unstable N-mono of Di-Chloramines, corrosive chlorine gas, explosive nitrogen trichloride, alkyl hypochlorites, and explosive chloroacetylenes.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : 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
LD50 dermal rabbit	> 2000 mg/kg
Sodium chloride (7647-14-5)	
LD50 oral rat	3 g/kg
LC50 inhalation rat (mg/l)	> 42 g/m <sup>3</sup> (Exposure time: 1 h)
Water (7732-18-5)	
LD50 oral rat	> 90 ml/kg
Calcium chloride (10043-52-4)	
LD50 oral rat	1000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
Calcium hydroxide (1305-62-0)	
LD50 oral rat	7340 mg/kg
Carbonic acid, calcium salt (1:1) (471-34-1)	
LD50 oral rat	6450 mg/kg

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 10.8

Serious eye damage/irritation : Causes serious eye damage.

pH: 10.8

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Very toxic to aquatic life.

Aquatic acute : Very toxic to aquatic life.

Aquatic 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])
LC50 fish 2	0.4 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
Sodium chloride (7647-14-5)	
LC50 fish 1	5560 - 6080 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
LC50 fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 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 Daphnia 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

CALCIUM HYPOCHLORITE, HYDRATED 2880	
Log Pow	-2.46
Sodium chloride (7647-14-5)	
BCF fish 1	(no bioaccumulation)
Calcium chloride (10043-52-4)	
BCF fish 1	(no bioaccumulation)
Calcium hydroxide (1305-62-0)	
BCF fish 1	(no bioaccumulation)
Carbonic acid, calcium salt (1:1) (471-34-1)	
BCF fish 1	(no bioaccumulation)

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

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

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
2880	2880	2880	2880	2880
14.2. UN proper shipping name				
CALCIUM	CALCIUM	CALCIUM	CALCIUM	CALCIUM

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

ADR	IMDG	IATA	ADN	RID
HYPOCHLORITE, HYDRATED	HYPOCHLORITE, HYDRATED	HYPOCHLORITE, HYDRATED	HYPOCHLORITE, HYDRATED	HYPOCHLORITE, HYDRATED
<b>14.3. Transport hazard class(es)</b>				
5.1	5.1	5.1	5.1	5.1
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR)	: O2
Special provision (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)	: MP10
Tank code (ADR)	: SGAN
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.)	: 50
Orange plates	:

Tunnel restriction code (ADR)	: E
EAC	: 1W

#### - Transport by sea

Special provision (IMDG)	: 314, 322
Limited quantities (IMDG)	: 1 kg
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P002
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)	: SG35, SG38, SG49, SG53, SG60
Properties and observations (IMDG)	: White or yellowish 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. Dust irritates mucous membranes.

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

### - 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 provision (IATA)	: A3, A8, A136
ERG code (IATA)	: 5L

### - Inland waterway transport

Classification code (ADN)	: O2
Special provision (ADN)	: 314, 322
Limited quantities (ADN)	: 1 kg
Excepted quantities (ADN)	: E2
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

### - Rail transport

Classification code (RID)	: O2
Special provision (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)	: MP10
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)	: 50

### 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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

CALCIUM HYPOCHLORITE, HYDRATED 2880 is not on the REACH Candidate List

CALCIUM HYPOCHLORITE, HYDRATED 2880 is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

# CALCIUM HYPOCHLORITE, HYDRATED 2880

## Safety Data Sheet

according to Regulation (EU) 2015/830

NIET-limitatieve lijst van voor de voortplanting : The substance is not listed  
giftige stoffen – Ontwikkeling

### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:

Not applicable.

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
LC50	Median lethal concentration
LD50	Median lethal dose
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

Data sources : Loli. ECHA reference.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging and in line with the expectations of a professional user.

Other information : None.

Full text of H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Ox. Sol. 2	Oxidizing solids Category 2
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

*The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the te*