Cembrite

Safety Data Sheet

According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Revision date: 02/10/2015 Date of issue: 02/10/2015 Version: 1.1

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

1.1. Product identifier

Product form : Mixture

Product Name : Cembrite

Product code : KE55

Synonyms : Hydrochloric Acid Solution

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

1.2.1. Relevant identified uses

Use of the substance/mixture : A fast working concrete floor cleaner. For professional use only.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

1.4.

Emergency number : 1-800-424-9300 (CHEMTREC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Met. Corr. 1	H290
Skin Corr. 1A	H314
Eye Dam. 1	H318
Acute Tox. (inhalation) 4	H332

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage
H332 – Harmful if inhaled

Precautionary statements (CLP) : P234 - Keep only in original container.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 CENTER or doctor.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other hazards

Other hazards not contributing to the classification : May be corrosive to respiratory tract. When heated to decomposition, emits toxic fumes. Contact with metals may evolve flammable hydrogen gas.

Results of PBT and vPvB assessment : This substance/mixture does not meet the PBT or vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS No) 7732-18-5 (EC no) 231-791-2	75,00	Not classified
Hydrochloric acid	(CAS No) 7647-01-0 (EC no) 231-595-7 (EC index no) 017-002-00-2	25,00	Met. Corr. 1, H290 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact : Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries : Corrosive to eyes, respiratory system and skin.

Symptoms/injuries after inhalation : Harmful if inhaled

Symptoms/injuries after skin contact : Causes serious burns. Contact may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.

Chronic symptoms : None expected under normal conditions of use.

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

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not considered flammable but may burn at high temperatures.
Explosion hazard : Product is not explosive.
Reactivity : May be corrosive to metals. Thermal decomposition generates corrosive vapours. May react with acids to release CO_2 gas and heat. May react with ammonia salt to form ammonia gas. May form carbon monoxide in contact with reducing sugars. Contact with metals may evolve flammable hydrogen gas.

5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.
Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all contact with skin, eyes, or clothing. Avoid breathing vapour, mist, or spray.

6.1.1. For non-emergency personnel

Protective equipment : Use appropriate personal protection equipment (PPE).
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill.

6.4. Reference to other sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : May be corrosive to metals.
Precautions for safe handling : Do not breathe vapors, mist, spray. Use only outdoors or in a well-ventilated area.
Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.
Storage conditions : Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Keep container closed when not in use. Store locked up.
Incompatible products : Strong acids. Strong bases. Strong oxidizers. Aluminum. Tin. Lead. Zinc.
Special rules on packaging : Store in original container or corrosive resistant and/or lined container.

7.3. Specific end use(s)

Toilet cleaner/descaler. For professional use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

This product and its constituents do not have any established DNEL or PNEC values.

Hydrochloric acid (7647-01-0)		
EU	IOELV TWA (mg/m³)	8 mg/m³
EU	IOELV TWA (ppm)	5 ppm

Hydrochloric acid (7647-01-0)		
EU	IOELV STEL (mg/m³)	15 mg/m³
EU	IOELV STEL (ppm)	10 ppm
Austria	MAK (mg/m³)	8 mg/m³
Austria	MAK (ppm)	5 ppm
Austria	MAK Short time value (mg/m³)	15 mg/m³
Austria	MAK Short time value (ppm)	10 ppm
Belgium	Limit value (mg/m³)	8 mg/m³
Belgium	Limit value (ppm)	5 ppm
Belgium	Short time value (mg/m³)	15 mg/m³
Belgium	Short time value (ppm)	10 ppm
Bulgaria	OEL TWA (mg/m³)	8,0 mg/m³
Bulgaria	OEL TWA (ppm)	5 ppm
Bulgaria	OEL STEL (mg/m³)	15,0 mg/m³
Bulgaria	OEL STEL (ppm)	10 ppm
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	8 mg/m³
Croatia	GVI (granična vrijednost izloženosti) (ppm)	5 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	15 mg/m³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	10 ppm
Cyprus	OEL TWA (mg/m³)	8 mg/m³
Cyprus	OEL TWA (ppm)	5 ppm
Cyprus	OEL STEL (mg/m³)	15 mg/m³
Cyprus	OEL STEL (ppm)	10 ppm
France	VLE (mg/m³)	7,6 mg/m³ (restrictive limit)
France	VLE (ppm)	5 ppm (restrictive limit)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	3 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 900 Occupational exposure limit value (ppm)	2 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Gibraltar	OEL TWA (mg/m³)	8 mg/m³
Gibraltar	OEL TWA (ppm)	5 ppm
Gibraltar	OEL STEL (mg/m³)	15 mg/m³
Gibraltar	OEL STEL (ppm)	10 ppm
Greece	OEL TWA (mg/m³)	7 mg/m³
Greece	OEL TWA (ppm)	5 ppm
Greece	OEL STEL (mg/m³)	7 mg/m³
Greece	OEL STEL (ppm)	5 ppm
USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
Italy	OEL TWA (mg/m³)	8 mg/m³
Italy	OEL TWA (ppm)	5 ppm
Italy	OEL STEL (mg/m³)	15 mg/m³
Italy	OEL STEL (ppm)	10 ppm
Latvia	OEL TWA (mg/m³)	8 mg/m³

Hydrochloric acid (7647-01-0)		
Latvia	OEL TWA (ppm)	5 ppm
Spain	VLA-ED (mg/m³)	7,6 mg/m³ (indicative limit value)
Spain	VLA-ED (ppm)	5 ppm (indicative limit value)
Spain	VLA-EC (mg/m³)	15 mg/m³
Spain	VLA-EC (ppm)	10 ppm
Switzerland	VLE (mg/m³)	6 mg/m³
Switzerland	VLE (ppm)	4 ppm
Switzerland	VME (mg/m³)	3,0 mg/m³
Switzerland	VME (ppm)	2 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	8 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	15 mg/m³
United Kingdom	WEL TWA (mg/m³)	2 mg/m³ (aerosol mist and gas)
United Kingdom	WEL TWA (ppm)	1 ppm (aerosol mist and gas)
United Kingdom	WEL STEL (mg/m³)	8 mg/m³ (aerosol mist and gas)
United Kingdom	WEL STEL (ppm)	5 ppm (aerosol mist and gas)
Czech Republic	Expoziční limity (PEL) (mg/m³)	8 mg/m³
Denmark	Grænseværdie (ceiling) (mg/m³)	8 mg/m³
Denmark	Grænseværdie (ceiling) (ppm)	5 ppm
Estonia	OEL TWA (mg/m³)	8 mg/m³
Estonia	OEL TWA (ppm)	5 ppm
Estonia	OEL STEL (mg/m³)	15 mg/m³
Estonia	OEL STEL (ppm)	10 ppm
Finland	HTP-arvo (15 min)	7,6 mg/m³ (including solution)
Finland	HTP-arvo (15 min) (ppm)	5 ppm (including solution)
Hungary	AK-érték	8 mg/m³
Hungary	CK-érték	16 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	8 mg/m³
Ireland	OEL (8 hours ref) (ppm)	5 ppm
Ireland	OEL (15 min ref) (mg/m3)	15 mg/m³
Ireland	OEL (15 min ref) (ppm)	10 ppm
Lithuania	IPRV (mg/m³)	8 mg/m³
Lithuania	IPRV (ppm)	5 ppm
Lithuania	TPRV (mg/m³)	15 mg/m³
Lithuania	TPRV (ppm)	10 ppm
Luxembourg	OEL TWA (mg/m³)	8 mg/m³
Luxembourg	OEL TWA (ppm)	5 ppm
Luxembourg	OEL STEL (mg/m³)	15 mg/m³
Luxembourg	OEL STEL (ppm)	10 ppm
Malta	OEL TWA (mg/m³)	8 mg/m³
Malta	OEL TWA (ppm)	5 ppm
Malta	OEL STEL (mg/m³)	15 mg/m³
Malta	OEL STEL (ppm)	10 ppm
Norway	Gjennomsnittsverdier (Takverdi) (mg/m³)	7 mg/m³
Norway	Gjennomsnittsverdier (Takverdi) (ppm)	5 ppm
Poland	NDS (mg/m³)	5 mg/m³
Poland	NDSCh (mg/m³)	10 mg/m³

Hydrochloric acid (7647-01-0)		
Romania	OEL TWA (mg/m³)	8 mg/m³
Romania	OEL TWA (ppm)	5 ppm
Romania	OEL STEL (mg/m³)	15 mg/m³
Romania	OEL STEL (ppm)	10 ppm
Slovakia	NPHV (priemerná) (mg/m³)	8,0 mg/m³
Slovakia	NPHV (priemerná) (ppm)	5 ppm
Slovakia	NPHV (Hraničná) (mg/m³)	15 mg/m³
Slovenia	OEL TWA (mg/m³)	8 mg/m³ (anhydrous)
Slovenia	OEL TWA (ppm)	5 ppm (anhydrous)
Slovenia	OEL STEL (mg/m³)	16 mg/m³ (anhydrous)
Slovenia	OEL STEL (ppm)	10 ppm (anhydrous)
Sweden	takgränsvärde (TGV) (mg/m³)	8 mg/m³
Sweden	takgränsvärde (TGV) (ppm)	5 ppm
Portugal	OEL TWA (mg/m³)	8 mg/m³ (indicative limit value)
Portugal	OEL TWA (ppm)	5 ppm (indicative limit value)
Portugal	OEL STEL (mg/m³)	15 mg/m³ (indicative limit value)
Portugal	OEL STEL (ppm)	10 ppm (indicative limit value)
Portugal	OEL - Ceilings (ppm)	2 ppm
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal protective equipment : Protective goggles. Face shield. Corrosionproof clothing. Gloves. Insufficient ventilation: wear respiratory protection.

Materials for protective clothing : Corrosionproof clothing.

Hand protection : Wear chemically resistant protective gloves.

Eye protection : Chemical goggles or face shield.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental exposure controls : Do not allow the product to be released into the environment.

Consumer exposure controls : Do not eat, drink or smoke during use.

Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Colourless

Odour : Acidic

Odour threshold : No data available

pH : <1

Evaporation rate : No data available

Melting point : 0 °C (32 °F)

Freezing point : No data available

Boiling point : 100 °C (212 °F)

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.01 (Water=1)
Solubility	: Water: Complete
Partition coefficient: n-octanol/water	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur under normal conditions.

10.4. Conditions to avoid

Direct sunlight. Heat. Ignition sources. Extremely high or low temperatures. Incompatible materials.

10.5. Incompatible materials

strong acids. Strong bases. Strong oxidizers. Alkaline earth metals. Active metals.

10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours. Carbon oxides (CO, CO_2). Chlorine.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Hydrochloric acid (7647-01-0)	
LD50 dermal rabbit	> 5010 mg/kg
ATE CLP (dust,mist)	0,50 mg/l/4h

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: <1
Serious eye damage/irritation	: Causes serious eye damage. pH: <1
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Hydrochloric acid (7647-01-0)	
IARC group	3

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/Injuries After Inhalation	: May be corrosive to the respiratory tract.
Symptoms/Injuries After Skin Contact	: Causes severe skin burns and eye damage.
Symptoms/Injuries After Eye Contact	: Causes serious eye damage.
Symptoms/Injuries After Ingestion	: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms	: None expected under normal conditions of use.

SECTION 12: Ecological information

12.1. Toxicity

Hydrochloric acid (7647-01-0)	
LC50 fish 1	3,25 - 3,5 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

Hydrochloric acid (7647-01-0)	
EC50 Daphnia 1	4,92 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and degradability

Cembrite	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Cembrite	
Bioaccumulative potential	Not established.

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

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

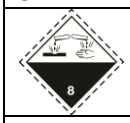
13.1. Waste treatment methods

Sewage disposal recommendations : Do not empty into drains; dispose of this material and its container in a safe way.

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations. RCRA Waste Code: D002 (Corrosive Material).

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1789	1789	1789	1789	1789
14.2. UN proper shipping name				
HYDROCHLORIC ACID (Solution)	HYDROCHLORIC ACID (Solution)	Hydrochloric acid (Solution)	HYDROCHLORIC ACID (Solution)	HYDROCHLORIC ACID (Solution)
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

14.6. Special precautions for user

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

This product is classified according to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008.

Contains no substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Hydrochloric acid (7647-01-0)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Water (7732-18-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Revision date : 02/10/2015

Data sources : According to regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008

Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Press. Gas	Gases under pressure
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

EU GHS SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.