Printing date 26.10.2021 Version: 6 (replaces version 5) Revision: 26.10.2021

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

- · 1.1 Product identifier
- · Trade name: CEMEX
- · Article number: 01020003
- · UFI: STV3-GX54-7206-PX67
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Life cycle stages

IS Use at industrial Sites

PW Widespread use by professional workers

· Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

- Product category PC35 Washing and cleaning products (including solvent based products)
- · Process category

PROC19 Manual activities involving hand contact

PROC7 Industrial spraying PROC11 Non industrial spraying

- · Application of the substance / the mixture Descalant
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

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· 1.4 Emergency telephone number:

NHS +44 0845 46 47 (England or Wales); +44 08454 24 24 24 (Scotland)

emergency number (europe): 112

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

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STOT SE 3 H335 May cause respiratory irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.
- Hazard pictograms





- · Signal word Danger
- · Hazard-determining components of labelling:

hydrochloric acid

· Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

· Precautionary statements

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P312 Call a POISON CENTER/doctor if you feel unwell.

P405

P501 Dispose of contents/container in accordance with local/regional/national/international regulations. · 2.3 Other hazards The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.

· Results of PBT and vPvB assessment

· PBT: Not applicable. · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 7647-01-0	hydrochloric acid	≥10-<25%	
	♦ Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318		
	◆ STOT SE 3, H335		
Reg.nr.: 01-2119484862-27-xxxx	cxxx Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 %		
	Skin Irrit. 2; H315: 10 % ≤ C < 25 %		
	Eye Irrit. 2; H319: 10 % ≤ C < 25 %		
	STOT SE 3; H335: C ≥ 10 %		

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Seek medical treatment.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

If symptoms persist consult doctor.

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

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SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Wear fully protective suit.

• Additional information Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Keep contaminated washing water and dispose of appropriately.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, universal binders).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Open and handle receptacle with care.

 ${\it Ensure good ventilation/exhaustion \ at \ the \ workplace}.$

 $Prevent\ formation\ of\ aerosols.$

Use only in well ventilated areas.

- Information about fire and explosion protection: Keep respiratory protective device available.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Do not store together with alkalis (caustic solutions).
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

CAS: 7647-01-0 hydrochloric acid

IOELV Short-term value: 15 mg/m³, 10 ppm

Long-term value: 8 mg/m³, 5 ppm

- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

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Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or sniff while working.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection



Protective gloves

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

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

- · Not suitable are gloves made of the following materials: Strong material gloves
- · Eye/face protection



Tightly sealed goggles

· Body protection:

Protective work clothing Acid resistant protective clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

Physical state
Colour:
Colour:
Characteristic
Codour threshold:
Melting point/freezing point:
Boiling point or initial boiling point and boiling range
Flammability
Fluid
Light yellow
Characteristic
Not determined.
Undetermined.
>103 °C
Not applicable.

Lower and upper explosion limit

Lower: Not determined.
Upper: Not determined.
Flash point: Not applicable.

· Auto-ignition temperature: Product is not selfigniting.

· Decomposition temperature: Not determined.

pH at 20 °C

· Viscosity:

• Kinematic viscosity at 20 °C 20 s (DIN 53211/4)
• Dynamic: Not determined.

Solubility

water: Fully miscible.
Partition coefficient n-octanol/water (log value)
Vapour pressure at 20 °C: 23 hPa

· Density and/or relative density

Density at 20 °C:
 Relative density
 Vapour density
 Not determined.
 Not determined.

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Trade name: CEMEX

		(Contd. of pag
9.2 Other information		
Appearance:		
Form:	Fluid	
Important information on protection of health and	1	
environment, and on safety.		
Explosive properties:	Product does not present an explosion hazard.	
	Not determined.	
Swiss VOC:	0.00 %	
Solids content:	8.4 %	
Change in condition		
Evaporation rate	Not determined.	
Information with regard to physical hazard classes	S .	
Explosives	Void	
-	Void	
Flammable gases	Void	
3	Void	
Aerosols	Void	
	Void	
Oxidising gases	Void	
Similaring guides	Void	
Gases under pressure	Void	
Guses under pressure	Void	
Flammable liquids	Void	
1 tummuote tiquius	Void	
Flammable solids	Void	
1 tummuote sottus	Void	
Self-reactive substances and mixtures	Void	
Self reactive substances and matures	Void	
Pyrophoric liquids	Void	
1 yrophoric uquius	Void	
Pyrophoric solids	Void	
1 yropnoric souns	Void	
Salf heating substances and mixtures	voia Void	
Self-heating substances and mixtures	voia Void	
Substances and mixtures, which emit flammable g		
contact with water	Void	
contact with water	Void	
Oxidising liquids	v ota Void	
Ominising tiquias	voia Void	
Ovidicina solida	voia Void	
Oxidising solids	voia Void	
Omagnia nanovidas	voia Void	
Organic peroxides		
Commercian to an extension	Void	
Corrosive to metals	Void	
B 12 1 1 1	Void	
Desensitised explosives	Void	
	Void	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions Reacts with alkali (lyes).

Reacts with oxidising agents.

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Do not store together with alkalis (caustic solutions).
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

CAS: 7647-01-0 hydrochloric acid

Inhalative LC50/8 h 46.5 mg/m3 (Rat)

- · Skin corrosion/irritation Causes severe skin burns and eye damage.
- · Serious eye damage/irritation Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure May cause respiratory irritation.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

CAS: 7647-01-0 hydrochloric acid

LC50 / 96 h 20.5 mg/ltr (fish)

EC 50 / 72 H 0.73 (Daphnia magna (water flea))

- 12.2 Persistence and degradability No further relevant information available.
- · Other information: The product is biodegradable.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- · 12.7 Other adverse effects
- Additional ecological information:
- · General notes:

In accordance with the requirements of the RVO in the Act on Detergents and Cleansing Agents, tensides are biodegradable up to at least 90 %.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Disposal must be made according to official regulations

· European	· European waste catalogue		
06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES		
06 01 00	wastes from the manufacture, formulation, supply and use (MFSU) of acids		
06 01 02*	hydrochloric acid		
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity		
HP8	Corrosive		

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- · Uncleaned packaging:
- · Recommendation: Disposal in accordance with administrative provisions

SECTION 14: Transport information	
· 14.1 UN number or ID number · ADR, IMDG, IATA	UN1789
	UN1/07
· 14.2 UN proper shipping name · ADR	1789 HYDROCHLORIC ACID mixture
· IMDG, IATA	HYDROCHLORIC ACID mixture
· 14.3 Transport hazard class(es)	
· ADR	
· Class · Label	8 (C1) Corrosive substances. 8
· IMDG, IATA	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
Hazard identification number (Kemler code):	80
EMS Number:	F-A,S-B
· Segregation groups · Stowage Category	Strong acids C
· 14.7 Maritime transport in bulk according to IM	10
instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
Townsender	Maximum net quantity per outer packaging: 1000 ml
· Transport category · Tunnel restriction code	3 E
	.
· IMDG · Limited quantities (LQ)	5L
· Limitea quantities (LQ) · Excepted quantities (EQ)	Code: E1
Lacepieu quumunes (LV)	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml

SECTION 15: Regulatory information

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

UN 1789 HYDROCHLORIC ACID MIXTURE, 8, III

Reg. (EC) n. 1272/2008 - CLP;

· UN "Model Regulation":

Reg. (EC) n. 2015/830 annex II of REACH;

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Dir. 06/08 ADR - RID - IMDG - IATA;

Dir. 12/18 (Seveso III);

Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

- · Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.
- · Hazard pictograms





GHS05 GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

hydrochloric acid

· Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statements

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P312 Call a POISON CENTER/doctor if you feel unwell.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

- · National regulations:
- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 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.

· Relevant phrases

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

- · Classification according to Regulation (EC) No 1272/2008 Calculation method
- · Department issuing SDS:

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Safety data sheet according to 1907/2006/EC, Article 31

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Trade name: CEMEX

· Date of previous version: 22.10.2021

· Version number of previous version: 5

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

WELL: The highest acceptable concentration

IOELV: Indicative occupational exposure limit values
Met. Corr. 1: Corrosive to metals – Category 1
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.