ProductConcrete BusterRevision date17 August 2018Revision1

Safety Data Sheet (SDS)

Section 1: Identification of the substance/preparation and of the company/undertaking

<u>1.1 Product identifier</u>

Product name	Concrete Buster
Synonyms, Trade names	No information available.

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

Identified uses	Cleaning agent.
Uses advised against	Any other purpose.

<u>1.3 Details of the supplier of the safety data sheet</u>

Su	bb	lier
Ju	pp.	nor

Wes-Chem Products International Ltd. Drumduffy Drumkeeran Co. Leitrim N41 T998 Ireland Tel: 071 96 22555 info@weschem.ie

Contact person

1.4 Emergency telephone number

Emergency telephone	Emergency medical information: 8am-10pm (seven days) contact National Poisons
	Information Centre, Beaumont Hospital, Dublin 9. Tel 01 8092566
National emergency telephone	Call 999 or 112.
number	

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Label in accordance with (EC) no.

Classification (EC 1272/2008)	
Physical and chemical hazards	Me. Corr 1 - H290
Human health	Skin Corr. 1B - H314, Eye Dam. 1 - H318, STOT S
Environment	Aquatic Acute 1 - H400

2.2 Label elements

1272/2008

Contains Detergent labeling SODIUM HYPOCHLORITE 5 - 16% ≥5% <15% chlorine-based bleaching agents



SE 3 - H335

Signal word

Hazard statements

H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H400 Very toxic to aquatic life.

Precautionary statements

Prevention

Danger

 P280 Wear protective gloves/ protective clothing/eye protection/face protection. Response P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. Storage P405 Store locked up.
EUH031 Contact with acids liberates toxic gas.

2.3 Other hazards

None known.

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Reg. EU 1272/2008	%
SODIUM HYPOCHLORITE 5 - 16%		Skin Corr. 1B - H314, Eye Dam. 1 - H318, STOT SE 3 - H335, Me. Corr 1 - H290, Aquatic Acute 1 - H400	5-<16%
The full text for all hazard statem	ents are displayed in sec	tion 16.	

Composition comments

The data shown are in accordance with the latest EC Directives.

Section 4: First aid measures

4.1 Description of first aid measures

General information	As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during rescue. Provide general first aid, rest, warmth and fresh air.
Inhalation	Move the exposed person to fresh air at once. If breathing is difficult, oxygen should be administered by qualified personnel. If not breathing, give artificial respiration. Get prompt medical attention.
Ingestion	Get medical attention immediately. Do not induce vomiting. Provided the patient is fully conscious, washout mouth with water. Never give anything by mouth to an unconscious person. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.
Skin contact	SPEED IS ESSENTIAL. Take off contaminated clothing and shoes immediately. Promptly flush contaminated skin with water. Continue to rinse for at least 15 minutes. Seek medical attention immediately.
Eye contact	SPEED IS ESSENTIAL. Avoid contaminating unaffected eye. Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open. Remove contact lenses if present and easy to do so. Get medical attention immediately. In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).

4.2 Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the
	length of exposure.
Inhalation	Irritating to respiratory system. Symptoms: Breathing difficulties, cough, chemical
	pneumonitis, pulmonary oedema - Repeated or prolonged exposure: Nose bleeds, chronic
	bronchitis.
Ingestion	Severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus
	and the stomach. Risk of shock and respiratory disorder. Symptoms: Nausea, abdominal

Skin contact Eye contact	pain, bloody vomiting, diarrhoea, suffocation, cough, and severe shortness of breath. Risk of chemical pneumonitis from product inhalation. Corrosive! Can cause redness, pain, and severe skin burns. Symptoms: Redness, swelling of tissue, burns, ulceration. Corrosive! Vapours are irritating and may cause damage to the eyes. May cause irreversible eye damage. May cause blindness. Symptoms: Redness, lachrymation, swelling of tissue, burn.		
4.3 Indication of any immediate medical	attention and special treatment needed		
Notes to the physician	Treat symptomatically.		
Section 5: Fire-fighting measures			
5.1 Extinguishing media			
Extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Unsuitable extinguishing media	No unsuitable extinguishing media identified.		
5.2 Special hazards arising from the substance or mixture			
Hazardous combustion products	Hazardous decomposition products formed under fire conditions. In case of fire the product releases hydrogen chloride.		
Unusual fire & explosion hazards	Irritating or corrosive vapors may be emitted during a fire. Do NOT breathe fumes. Contain run-off. The product is oxidizing when dried.		
Specific hazards	Promotes combustion of combustible products or materials.		
5.3 Advice for firefighters			
Special fire fighting procedures	If possible, fight fire from protected position. Ventilate closed spaces before entering them. Keep up-wind to avoid fumes. Containers close to fire should be removed immediately or cooled with water. Suppress (knock down) gasses/vapours/mists with a water spray.		
Protective equipment for firefighters	s Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.		

Section 6: Accidental release measures

$\underline{6.1}$ Personal precautions, protective equipment and emergency procedures

• • •	
Personal precautions For emergency responders	Do not mix with other chemicals. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Eliminate all sources of ignition. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. Follow safe handling advice and personal protective equipment recommendations for normal use of product. Do not touch spilled material.
6.2 Environmental precautions	
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
6.3 Methods and material for containme	ent and cleaning up
Spill clean up methods	Ventilate and evacuate the area. Eliminate all ignition sources. Wear necessary protective equipment DO NOT touch spilled material! Stop leak if possible without risk. Use non - metallic tools/containers for clean up. Absorb spillage with inert, damp, non-combustible material or use a liquid binding material. Place waste material into suitable labelled sealed containers for disposal. Remove waste promptly to a safe area. Flush with plenty of water to clean spillage area.
6.4 Reference to other sections	
Reference to other sections	See section 1 for emergency contact. For personal protection, see section 8. For waste

disposal, see section 13.

Section 7: Handling and storage	
7.1 Precautions for safe handling	
Handling	Use personal protective equipment, see Section 8. Avoid contact with skin and eyes. Do no handle broken packages without protective equipment. Ensure adequate ventilation. Do not use contact lenses. Keep away from flammable materials and incompatible substances. Use only equipment and materials which are compatible with the product. Do not confine the product in a circuit, between closed valves, or in a container without a vent Always wash hands after handling.
7.2 Conditions for safe storage, in	acluding any incompatibilities
Storage precautions Storage class	Store in tightly closed original container in a dry, cool and well-ventilated place. Do not confine product in unvented vessels or between closed valves. Keep in a bunded area. Keep away from direct sunlight. Keep away from incompatible materials (see section 10). Corrosive storage
7.3 Specific end use(s)	
Specific end use(s) Usage description	The identified uses for this product are detailed in Section 1.2. Use only according to directions.
Section 8: Exposure controls/Pers	onal protection
3.1 Control parameters	
Ingredient comments	No exposure limits noted for ingredient(s).
Engineering measures Respiratory equipment	Provide adequate ventilation, including appropriate local extraction. When workers are facing concentrations above the exposure limit they must use appropria certified respirators. Use respirators and components tested and approved under appropriate government standards such as CEN (EU). If the respirator is the sole means of protection, use a full-face supplied air respirator. Self-contained breathing apparatus (EN 133). Respirator with a vapour filter (EN 141). In case of decomposition (see section 10),
Hand protection	 face mask with combined type B-P2 cartridge. Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. (EU Directive 89/686/EEC). Selection of the glove material depends on consideration of the penetration times, rates of diffusion an degradation, and concentration specific to the workplace. Gloves must be inspected prior tuse. Suggested material: Nitrile. Minimum layer thickness: >= 0.35 mm. Break through time: 480 min. Suggested material: PVC. Minimum layer thickness: 0.5 mm. Break through time: 480 min. Gloves must be inspected prior to use. Consult manufacturer for specific advice on material. Use proper glove removal technique (without touching glove's outer
Eye protection	surface) to avoid skin contact with this product. Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipmen for eye protection tested and approved under appropriate government standards such as I 166(EU).

Other protection

166(EU). Wear appropriate clothing to prevent any possibility of skin contact. The selected clothing must satisfy the European norm standard EN 943. Protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. **Process conditions**

DO NOT SMOKE IN WORK AREA! Wash hands after handling. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. Keep container tightly sealed when not in use. Ensure that eye flushing systems and safety showers are located close by in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties		
	Appearance Colour Odour	Liquid. Yellow-green. Chlorine Pungent.
	Odour threshold - lower	No information available.
	Odour threshold - upper	No information available.
	pH-Value, Conc. Solution	>11 (15% solution).
	pH-Value, Diluted solution	No information available.
	Melting point	No information available.
	Initial boiling point and boiling range	No information available.
	Flash point	No information available.
	Evaporation rate	No information available.
	Flammability state	No information available.
	Flammability limit - lower(%)	No information available.
	Flammability limit - upper(%)	No information available.
	Vapour pressure	No information available.
	Vapour density (air=1)	No information available.
	Relative density	1.25 at 20 °C (Chlorine;15%);1.3, at 21.2 °C (Chlorine; 24.3%).
	Bulk density	No information available.
	Solubility	Soluble in water
	Decomposition temperature	No information available.
	Partition coefficient; n- Octanol/Water	No information available.
	Auto ignition temperature (°C)	No information available.
	Viscosity	No information available.
	Explosive properties	No information available.
	Oxidising properties	No information available.
9.2 Other information		
	Molecular weight	No information available.
	Volatile organic compound	No information available.
	Other information	None noted.

Section 10: Stability and reactivity			
10.1 Reactivity			
Reactivity	Corrosive to metals. Contact with acids liberates toxic gas.		
10.2 Chemical stability			
Stability	Stable under normal temperature conditions and recommended use.		
10.3 Possibility of hazardous reactions			
Hazardous reactions	Metals: Decomposition with formation of oxygen. Acids: Violent decomposition with release of chlorine.		
Hazardous polymerisation Polymerisation description	Unknown. Not applicable.		
10.4 Conditions to Avoid			
Conditions to avoid	Heat, sparks, open flames, temperature extremes and direct sunlight. To avoid thermal decomposition do not overheat. Avoid freezing.		
10.5 Incompatible materials			
Materials to avoid	Metals, Salts of metals, Acids, Organic materials. Keep away from Nickel, Copper, Cobalt, Aluminium, Manganese.		
10.6 Hazardous decomposition products			
Hazardous decomposition products	Chlorine, Sodium chlorate, Hypochlorous acid, predominant at acid pH, is 4 to 5 fold more toxic than hypochlorite ion. The release of other hazardous decomposition products is possible.		

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicological information	No toxicological information for the overall finished product.
Acute toxicity (Oral LD50) Acute toxicity (Dermal LD50) Acute toxicity (Inhalation LD50)	LD50, rat, > 1,100 mg/kg (Chlorine). LD50, rabbit, > 20,000 mg/kg (Chlorine). LC50, 1 h, rat, > 10.5 mg/l (Chlorine).
Serious eye damage/irritation	Causes serious eye damage.
Skin corrosion/irritation	No information available.
Respiratory sensitisation Skin sensitisation	Guinea pig, did not cause sensitization on laboratory animals. Guinea pig, did not cause sensitization on laboratory animals.
Germ cell mutagenicity	In vitro, ambiguous mutagenic effect. In vivo tests did not show mutagenic effects.
Carcinogenicity	No information available.
Specific target organ toxicity - Sing	Jle exposure:
STOT - Single exposure	Human experience, Remarks: May cause respiratory irritation.
Specific target organ toxicity - Rep	
STOT - Repeated exposure	No information available.
Inhalation	Irritating to respiratory system. Symptoms: Breathing difficulties, cough, chemical pneumonitis, pulmonary oedema - Repeated or prolonged exposure: Nose bleeds, chronic bronchitis.
Ingestion	Severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Risk of shock and respiratory disorder. Symptoms: Nausea, abdominal pain, bloody vomiting, diarrhoea, suffocation, cough, and severe shortness of breath. Risk of
Skin contact	chemical pneumonitis from product inhalation. Corrosive! Can cause redness, pain, and severe skin burns. Symptoms: Redness, swelling of tissue, burns, ulceration.

Waste management	eye damage. May cause blindness. Symptoms: Redness, lachrymation, swelling of tissue, burn. When handling waste, consideration should be made to the safety precautions applying to handling of the product. For wastewater containng product, do not discharge into ground or drain without treatment.
Routes of entry Target organs	No information available. Eyes, skin, digestive system, respiratory system.
Aspiration hazards: Reproductive toxicity:	No information available. Oral, rat, 5 mg/kg, Effects on fertility, NOAEL, (Chlorine). Oral, rat, 5.7 mg/kg, Developmental Toxicity, NOAEL, (Chlorine).

Name	LD50 oral	LD50 dermal	LD50 inhalation
SODIUM HYPOCHLORITE 5 - 16%	>1100.00mg/kg Rat	>20000.00mg/kg Rabbit	>10.50mg/l (vapours) Rat 1 Hours

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish	Fishes, various species, LC50, 96 h, 0.06mg/l, fresh water (active chlorine). Fishes, Menidia peninsulae, NOEC, 96 h, 0.04 mg/l, salt water (Chlorine). Fishes, various species, 96 h, 0.032 mg/l, Marine water (active chlorine).		
Acute toxicity - Aquatic invertebrate	s Crustaceans, various species, EC50, 48 h, 0.026 mg/l (Chlorine). Crustaceans, Daphnia		
	magna, EC50, 48 h, 0.141 mg/l, fresh water (active chlorine).		
Acute toxicity - Aquatic plants	No information available.		
Acute toxicity - Microorganisms	No information available.		
Chronic toxicity - Fish	No information available.		
Chronic toxicity - Aquatic invertebrates	No information available.		
Chronic toxicity - Aquatic plants	No information available.		
Chronic toxicity - Microorganisms	No information available.		
Ecotoxicity	The product contains substance which is very toxic to aquatic life.		
Eco toxilogical information	The product contains a substance which is harmful to aquatic organisms.		
12.2 Persistence and degradability			
Degradability	The methods for determining biodegradability are not applicable to inorganic substances.		
Biological oxygen demand	No information available.		
Chemical oxygen demand	No information available.		
12.3 Bioaccumulative potential			
Bioaccumulative potential	Does not bioaccumulate.		
Bioaccumulation factor	No information available.		
Partition coefficient; n-	No information available.		
Octanol/Water			
<u>12.4 Mobility in soil</u>			
Mobility	Mobile in water environment.		
12.5 Results of PBT and vPvB assessment			
Results of PBT and vPvB assessment	t The product does not contain any PBT or vPvB Substances.		

12.6 Other adverse effects

Other adverse effects

No information available.

	Acute toxicity (Fish)	Acute toxicity (Aquatic invertebrates)	Acute toxicity (Aquatic plants)
SODIUM HYPOCHLORITE 5 - 16%	LC50 96 Hours 0.06ppm Freshwater Fish	EC50 48 Hours 0.14ppm Daphnia magna	

Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product. For wastewater containing product, do not discharge into ground o drain without treatment.	
3.1 Waste treatment methods		
Disposal methods	Dispose of waste and residues in accordance with local authority requirements, and in accordance with all local, national and international regulations. For waste disposal, use a licensed industrial waste disposal agent.	
Section 14: Transport information		
4.1 UN number		
UN no. (ADR) UN no. (IMDG) UN no. (IATA)	UN1791 UN1791 UN1791	
4.2 UN proper shipping name		
ADR proper shipping name IMDG proper shipping name IATA proper shipping name	HYPOCHLORITE SOLUTION HYPOCHLORITE SOLUTION HYPOCHLORITE SOLUTION	
4.3 Transport hazard class(es)		
ADR class IMDG class IATA class	8 8 8	
Transport labels		
4.4 Packing group	•	
ADR/RID/ADN packing group IMDG packing group IATA packing group	II II II	
<u>4.5 Environmental hazards</u>		
ADR IMDG IATA	Yes Yes Yes	
4.6 Special precautions for user		
EMS Emergency action code Hazard no. (ADR) Tunnel restriction code	F-A, S-B A3 A803 80 (E)	

Not applicable.

Section 15: Regulatory information

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

EU legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 453/2010 of 20th

	May 2010 amending regulation (EC) No 1907/2006.
Approved code of practice	2016 Code of Practice for the Chemical Agents Regulations in accordance with section 60 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).
Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010
Revision comments	This is first issue.
Revision date	17 August 2018
Revision	1
Safety data sheet status	Approved.

Hazard statements in full

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
EUH031	Contact with acids liberates toxic gas.

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.