SAFETY DATA SHEET

according to Regulation (EU) 2015/830

Sodium Hypochlorite Solution (Bleach)

Revision 34

Revision date 2020-10-23

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

1.1. Product identifier

Product name	Sodium Hypochlorite Solution (Bleach)
Product code	QAFS017

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC35] Washing and cleaning products (including solvent based products);
Description	A chlorine cleaning, bleaching and sterilising solution containing 5% Available Chlorine.

1.3. Details of the supplier of the safety data sheet

Company	Superfine Manufacturing Ltd
Address	Orchardbank Industrial Estate Forfar Angus Scotland DD8 1TD
Web	www.superfine.co.uk
Telephone	Tel: 01307 463538
Fax	Fax: 01307 468505
Email	nigel@superfine.co.uk
Email address of the competent person	nigel@superfine.co.uk

1.4. Emergency telephone number

Emergency telephone number	01307 463538 8.30am to 17.00pm National Poisons Information Service: For medical advice or information you should contact your GP or NHS 111 (or NHS 24 in Scotland) on 111 (for 24 hour health advice) If you are a healthcare professional with an enquiry please visit www.TOXBASE.org

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - EC 1272/2008	Skin Corr. 1A: H314; Aquatic Acute 1: H400; Aquatic Chronic 2: H411;

2.2. Label elements

Hazard pictograms	

Sodium Hypochlorite Solution (Bleach)

2.2. Label elements

Signal Word	Danger
Hazard Statement	Skin Corr. 1A: H314 - Causes severe skin burns and eye damage. Aquatic Acute 1: H400 - Very toxic to aquatic life. Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Precautionary Statement: Prevention	P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. 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.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved disposal site, in accordance with local regulations.
SUPPLEMENTAL HAZARD INFORMATION	EUH031 - Contact with acids liberates toxic gas. Ingredients as required by Regulation (EC) No 648/2004:. Ingredients - Aqua, Chlorine based bleaching agents (Sodium Hypochlorite).

2.3. Other hazards

Other hazards	This mixture is not classified as PBT or vPvB according to current EU criteria.

Further information

	SODIUM HYPOCHLORITE SOLUTION 5% Cl ACTIVE.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Sodium Hypochlorite Solution, ... % Cl Active		7681-52-9	231-668-3	01-2119488154-34	1 - 10%	EUH031; Met. Corr. 1: H290; Skin Corr. 1B: H314; Eye Dam. 1: H318; STOT SE 3: H335; Aquatic Acute 1: H400; Aquatic Chronic 1: H410;

Sodium Hypochlorite Solution ... % Cl Active - M Factor (Acute) = 10, M Factor (Chronic) = 1.

Further information

Product Shelf Life	Shelf life 6 months from date of delivery.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. Keep the affected person warm and at rest. Get medical attention immediately.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Contact lenses should be removed. Get medical attention immediately.
Skin contact	Remove contaminated clothing. Wash off immediately with plenty of soap and water. Get medical attention immediately.
Ingestion	Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING. Rinse mouth thoroughly. Get medical attention immediately.

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

Inhalation	Gas or Vapours in high concentrations may irritate the respiratory system. Contact with acids liberates toxic gas. Chlorine.
Eye contact	Causes burns. Risk of serious damage to eyes. May cause permanent damage if eye is not immediately irrigated.

Sodium Hypochlorite Solution (Bleach)

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

Skin contact	Causes burns.
Ingestion	Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

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

Inhalation	Move the exposed person to fresh air. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Seek medical attention. Show this safety data sheet to the doctor in attendance.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Contact lenses should be removed. Seek medical attention. Show this safety data sheet to the doctor in attendance.
Skin contact	Remove contaminated clothing immediately. Rinse immediately with plenty of water. Seek medical attention. Show this safety data sheet to the doctor in attendance.
Ingestion	Drink 1 to 2 glasses of water. Seek medical attention. Show this safety data sheet to the doctor in attendance.

General information

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

	This product is not flammable . Use fire-extinguishing media appropriate for surrounding materials. Extinguishing media. - Water spray.

5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes.

5.3. Advice for firefighters

	Fire fighters should wear self contained positive pressure breathing apparatus (SCBA) and full turnout gear.

Further information

	In the event of a fire and/or explosion do not breath fumes. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Wear personal protective equipment listed in section 8. Avoid contact with skin and eyes. Avoid inhalation of vapour or spray/mist. Provide adequate ventilation.

6.2. Environmental precautions

	Advise local authorities if large spills cannot be contained.

6.3. Methods and material for containment and cleaning up

	Absorb with inert, absorbent material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Contain and collect extinguishing water.

6.4. Reference to other sections

	See section 2, 7, 8, 13 for further information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Avoid contact with eyes and skin. Do not breathe vapours or spray mist. Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid release to the environment. Refer to special instructions/Safety data sheets. Provide adequate ventilation.

Sodium Hypochlorite Solution (Bleach)

7.1. Precautions for safe handling

	Contact with acids liberates toxic gas. Chlorine.

7.2. Conditions for safe storage, including any incompatibilities

	Protect from frost, heat and sunlight. Store in a cool, dry area. Store in original container. Keep container tightly closed. Keep away from acids, Combustible materials, Ammonia. May be corrosive to metals.

7.3. Specific end use(s)

	A chlorine cleaning, bleaching and sterilising solution containing 5% Available Chlorine.

Suitable packaging

	Plastic containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

	Occupational exposure controls. No exposure limits noted for ingredient(s).

8.2. Exposure controls

	
	Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with skin and eyes. Avoid inhalation of vapour or spray/mist. Handle in accordance with good industrial hygiene and safety practice. Use appropriate personal protective equipment. Wear suitable protective clothing and eye/face protection. Provide eyewash station and safety shower. Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
8.2.1. Appropriate engineering controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below there respective threshold limit value. Ensure eyewash stations and safety showers are close to the workstation location. Avoid inhalation of vapour or spray/mist.
Eye / face protection	Avoid contact with eyes. If splashes are likely to occur, wear: safety glasses with side-shields. EN 166.
Skin protection - Handprotection	Rubber gloves. Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.
Skin protection - Other	Wear rubber apron. Wear rubber footwear.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149.
8.2.3. Environmental exposure controls	Prevent further leakage or spillage if safe to do so.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Sodium Hypochlorite Solution (Bleach)

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless
Odour	Chlorine
Explosive properties	No data available
Oxidising properties	No data available
Odour threshold	No data available
pH	> 12.5
Melting point	No data available
Initial boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.08 - 1.087
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	< 20 centipoise
Solubility	Soluble in water

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

Water solubility

soluble.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions. Contact with acids liberates Toxic Gas (CHLORINE).

10.2. Chemical stability

Stable under normal conditions. No particular stability concerns.

10.3. Possibility of hazardous reactions

Strong acids. Strong oxidising agents. Contact with acids liberates Toxic Gas (CHLORINE).

10.4. Conditions to avoid

Protect from frost. Avoid excessive heat for prolonged periods of time. Avoid storing in direct Sun Light.

10.5. Incompatible materials

Strong acids. Amines. contact with metals may result in decomposition with the formation of Oxygen.

10.6. Hazardous decomposition products

No Hazardous decomposition products when stored and handled correctly. Oxygen. hypochlorus acid Chlorine.

Sodium Hypochlorite Solution (Bleach)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

	This mixture has not been tested as a whole for health effects. The health effects have been calculated using the methods outlined in Regulation (EC) No 1272/2008 (CLP).
Acute toxicity	based on available data the classification criteria are not met.
Skin corrosion/irritation	Skin Corr. 1A: H314 - Causes severe skin burns and eye damage. Extreme pH - ≥ 11.5. Corrosive to skin.
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	based on available data the classification criteria are not met.
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.

11.1.2. Mixtures

No data available.

11.1.3. Hazard Information

No data available.

11.1.4. Toxicological Information

Sodium Hypochlorite Solution (Bleach)	**Oral Rat LD50:** 1,100 mg/kg	**Dermal Rabbit LD50:** 2,000 mg/kg
	Inhalation Rat LC50/4 h: 10,500 mg/l	

SECTION 12: Ecological information

12.1. Toxicity

Sodium Hypochlorite Solution (Bleach)	**Daphnia EC50/48h:** 0.1410 mg/l	**Fish LC50/96h:** 0.0600 mg/l
	Algae EC50/72h: 0.04 mg/l	

12.2. Persistence and degradability

Substance is inorganic.

12.3. Bioaccumulative potential

The product is not bioaccumulating.

Partition coefficient

Sodium Hypochlorite Solution (Bleach)	No data available

12.4. Mobility in soil

This product is soluble in water.

12.5. Results of PBT and vPvB assessment

This mixture is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

Sodium Hypochlorite Solution (Bleach)

13.1. Waste treatment methods

	Dispose of waste and residues in accordance with local authority requirements.

General information

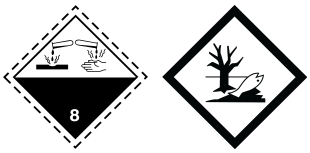
	Dispose of in compliance with all local and national requirements.

Disposal of packaging

	Do NOT reuse empty containers. Empty containers can be sent to landfill after cleaning, if in compliance with local and national regulations.

SECTION 14: Transport information

Hazard pictograms



14.1. UN number

	UN1791

14.2. UN proper shipping name

	HYPOCHLORITE SOLUTION

14.3. Transport hazard class(es)

ADR/RID	8
Subsidiary risk	-
IMDG	8
Subsidiary risk	-
IATA	8
Subsidiary risk	-

14.4. Packing group

Packing group	III

14.5. Environmental hazards

Environmental hazards	Yes
Marine pollutant	Yes

14.6. Special precautions for user

	No additional special precautions.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

	Not applicable.

ADR/RID

Hazard ID	80
Tunnel Category	(E)

IMDG

EmS Code	F-A S-B

IATA

Packing Instruction (Cargo)	856
Maximum quantity	60 L
Packing Instruction (Passenger)	852
Maximum quantity	5 L

Sodium Hypochlorite Solution (Bleach)

SECTION 15: Regulatory information

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

Regulations	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

	No information available.

SECTION 16: Other information

Other information

Revision	This document differs from the previous version in the following areas:. 2 - Hazard pictograms. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - Precautionary Statement: Storage. 3 - 3.2. Mixtures. 5 - 5.2. Special hazards arising from the substance or mixture. 5 - 5.3. Advice for firefighters. 11 - 11.1.4. Toxicological Information. 12 - 12.1. Toxicity. 12 - 12.4. Mobility in soil. 12 - 12.2. Persistence and degradability. 12 - 12.3. Bioaccumulative potential. 12 - 12.5. Results of PBT and vPvB assessment.
Data sources	Classification and Procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008:. Skin Corr. 1A: H314 - Causes severe skin burns and eye damage. - Extreme pH - ≥ 11.5. Aquatic Acute 1: H400 - Very toxic to aquatic life. - Calculation Method, M Factor (Acute) = 10. Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects. - Calculation Method, M Factor (Chronic) = 1.
Text of Hazard Statements in Section 3	EUH031 - Contact with acids liberates toxic gas. Met. Corr. 1: H290 - May be corrosive to metals. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Eye Dam. 1: H318 - Causes serious eye damage. STOT SE 3: H335 - May cause respiratory irritation. Aquatic Acute 1: H400 - Very toxic to aquatic life. Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.

Further information

	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process.

Sodium Hypochlorite Solution (Bleach)