



Safety Data Sheet

according to 1907/2006/EC, Article 31

www.benzsoftwash.com

Trade name: **Lightning Cleanze**

Revision: 2. Date: February 2018

1. Identification of the substance/preparation and of the company/undertaking

1.1 Product identifier

- Trade name: **Lightning Cleanze**
- PRCD number: 98411
- HSE approval number: 10161

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

- Application of the substance / the mixture: Biocidal product for the treatment of exterior hard surfaces.

1.3 Details of the supplier of the safety data sheet

- Address and telephone number of the supplier:

BENZ Softwash Ltd

Trabolgan Road

Whitegate

Midleton

Cork, Ireland.

Phone: (IRE) +353 (0) 21 46 22 978

Email: support@benzsoftwash.com

- Competent person responsible for the Material Safety Data Sheet:

Technical director: support@benzsoftwash.com

1.4 EMERGENCY PHONE NUMBERS

National Poisons Information Service UK: **Phone:** +44 (0) 844-892-0111

Poisons Information Service of Ireland: **Phone:** 01 809 2166

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008



GHS05 Corrosion

Skin Corrosion, Category 1B H314 Causes severe skin burns and eye damage.

Corrosive to metals, Category 1 H290 May be corrosive to metals.



GHS05 Environment

Aquatic Acute 1
Aquatic Chronic 2

H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

- Labeling according to Regulation (EC) No 1272/2008

The product is labeled according to the CLP regulation.

- Hazard pictograms



Signal word: Danger

- Hazard-determining components of labelling: Sodium hypochlorite

- Hazard statements:

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life.

H290 May be corrosive to metals.

- Precautionary statements:

P260 Do not breathe dust or mist.

P273 Avoid release to the environment.

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

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.

SECTION 3: Composition/information on ingredients

3.1 Type of product: Sodium Hypochlorite Aqueous Solution

- Hazardous components

Sodium hypochlorite

Concentration (%): 5-10

CAS-No.: 7681-52-9

EINECS-No.: 231-668-3

Index-No.: 017-011-00-1

Sodium hydroxide

Concentration (%): 0-5

CAS-No.: 1310-73-2

EINECS-No.: 215-185-5

Index-No.: 011-002-00-6



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Section 4. First-aid measures

4.1 Description of first aid measures

- **General advice:** Remove victims from the danger zone without endangering your own safety.

Remove contaminated clothing (including underwear and shoes) immediately.

- **If inhaled:** Bring accident victims out into the fresh air. If patient has difficulty in breathing, administer oxygen, keep the patient calm and warm. Call a physician immediately.

- **In case of skin contact:** After contact with skin, wash immediately with plenty of water. Apply sterile protective bandage; consult GP.

- **In case of eye contact:** Hold the eyes open and rinse with preferably lukewarm water for a sufficiently long period of time (at least 10 minutes). Contact an ophthalmologist.

- **If swallowed:** If swallowed, rinse mouth with water (only if the person is conscious). DO NOT induce the patient to vomit, medical advice is required.

4.2 Most important symptoms and effects, both acute and delayed

Notes to physician: Inhalation may provoke: cough, headache, lung oedema. Risk of serious damage to the lungs (by aspiration)

4.3 Indication of any immediate medical attention and special treatment needed

- **Therapeutic measures:** Treat symptomatically, Later control for pneumonia and lung oedema.

5. Fire-fighting measures

5.1 Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

- **Unsuitable extinguishing media:** none identified.

5.2 Special hazards arising from the substance or mixture:

Burning releases chlorine, hydrogen chloride gas, chlorine oxides. In the event of fire and/or explosion do not breathe fumes.

5.3 Advice for fire-fighters:

During fire-fighting respirator with independent air-supply and airtight garment is required.

Fight fire in early stages if safe to do so. Containers at risk of fire should be cooled with water and, if possible removed from the danger area. Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Put on protective equipment (see Section 8). Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

6.2.1 Environmental precautions: Do not flush into soil, surface water or sanitary sewers system.

6.3 Methods and material for containment and cleaning up:

Take up with absorbent for chemicals or, if necessary with dry sand. Fill into labelled, sealable containers. Also place used cleaning materials into closable receptacles.

6.4 Reference to other sections: For further measures see Sections 8 and 13.



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7. Handling and storage

7.1 Precautions for safe handling:

Handle and open container with care. Provide sufficient air exchange and/or exhaust in work rooms.

Organize work procedures so that workers are not exposed to the effects of the products. Vent waste air only via suitable separator or scrubbers.

Precautions should generally be taken against electrostatic charges according to the equipment used and the way the product is handled and packaged.

The precautions required in the handling of irritant or corrosive substances must be taken.

Contact with skin and eyes and inhalation of vapors must be avoided under all circumstances.

Careful attention to industrial and personal hygiene is essential. Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at the end of work day.

Keep working clothes separately. Change contaminated or soaked clothing immediately. If the suit becomes contaminated, first take a shower with the suit on.

Keep away from incompatible products and naked flames/heat.

Do not discharge the waste into drains.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a dry, well-ventilated, bunded area.

Keep in properly labelled closed containers.

Keep away from incompatible products and naked flames/heat.

Keep away from: combustible materials, (strong) acids, metals and ammonium salts

7.3 Specific end use(s):

For further information contact the supplier.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

Substance	CAS-No.	Basis	Type	Value	Ceiling Limit Value
Sodium Hydroxide					
(Caustic Soda)	1310-73-2	EH40 WEL	STEL	2mg/m3	
Chlorine	7782-50-5	EH40 WEL	STEL	1.5mg/m3	

For technical protective measures to limit exposure see also Section 7 "Handling and storage".

8.2 Exposure controls

- General protective and hygienic measures:

Use skin cream for skin protection.

Avoid contact with the eyes and the skin.

Do not inhale gases/fumes/aerosols.

Wear alkali resistant clothing.

Wash hands during work breaks and at the end of the shift.

Provide skin protection plan.

Personal protective equipment

- **Respiratory protection:** Filter B/P2.
- **Protection of hands:**



Chemical protective gloves according to DIN EN 374 with CE-labelling.

Check the condition of protective gloves after each use for any damages like holes, cuts or tears.

Do not wear protective gloves longer than necessary.

After use of gloves apply skin-cleaning agents and skin cosmetics.

- **Material of gloves:** Nitrile rubber, NBR

- **Penetration time of glove material:**

Thickness: 0.4 mm; break-through time: 480 min; material: Nitrile; permeation: level 6

- **Gloves made of the following materials are not suitable:**

Gloves for mechanical protection do not provide protection against chemicals.

- **Eye protection:**



Face shield (visor)

A device for rinsing eyes must be available at the work place.

Use visor in combination with goggle.

- **Body protection:**



Protective clothing.



Apron

Full head, face and neck protection.

- **Risk management measures**

The operators shall be instructed adequately.

The workplace shall be inspected regularly by competent personnel e.g. the safety representative.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	liquid
Colour:	yellowish green
Odour:	slight chlorine
Odour Threshold:	not established
pH:	>11 at 20°C
Melting point/range:	-17°C
Boiling point/range:	110°C
Flash point:	not applicable
Evaporation rate:	not established
Flammability(solid, gas):	does not ignite
Burning number:	not applicable
Vapour pressure:	not established
Relative vapour density:	>1.0 (air =1)
Density:	1.2 – 1.3



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Surface tension:	not established
Partition coefficient: (n-octanol/water):	not established
Autoignition temperature:	not applicable
Ignition temperature:	not applicable
Decomposition temperature:	not established
Viscosity, dynamic:	3.45 mPa.s at 20oC
Explosive properties:	not explosive
Dust explosion class:	not applicable
Oxidising properties:	not established

9.2 Other information

- Miscibility with water: miscible

10. Stability and Reactivity

10.1 Reactivity:

Reacts with many inorganic and organic compounds.

10.2 Stability:

Decomposes on heating.

Decomposes on exposure to light.

10.3. Possibility of hazardous reactions

Reaction with acid solutions may release chlorine gas.

10.4 Conditions to avoid:

Heating, exposure to acids

10.5 Materials to avoid: - Acids, ammonium compounds, acetic anhydride, organic materials, hydrogen peroxide, metal salts, copper, nickel and iron

10.6 Hazardous Decomposition Products: Hydrogen chloride gas, chlorine, chlorine oxide.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity Oral Value type: LD50
Value: 2,900 - 3,400 mg/kg
Species: mouse

Remarks: Cause serious burns with severe pains, vomiting, pains in the stomach, possibly chock and damaged kidneys. The burn may occur even if only small amounts have been swallowed.

Acute toxicity Inhalation Value type: LC50
Value: > 10.5 mg/l
Species: rat

Acute toxicity Dermal Value type: LD50
Value: > 2,000 mg/kg
Species: rabbit



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Acute toxicity Irritation Skin

Species: rabbit
Result: Severe skin irritation
Method: OECD Test Guideline 404
Species: human.

Acute toxicity Irritation Eyes

Result: corrosive effects
Specie: rabbit
Result: corrosive effects
Remarks: Risk of serious damage to eyes.

Sensitisation

Species: guinea pig
Result: not sensitizing

Further information all numerical values for acute toxicity are calculated on the pure substances. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Handle in accordance with good industrial hygiene and safety Practice.

12. Ecological information

12.1. Toxicity

Acute toxicity Fish

Species: Pimephales promelas
Exposure Time: 96 h
Value type: LC50
Value: 0.22 - 0.62 mg/l

Toxicity to daphnia and other aquatic invertebrates

Species: Daphnia magna
Exposure time: 96 h
Value type: EC50
Value: 2.1 mg/l

Algae

Species: Desmodesmus subspicatus (green algae)
Exposure time: 24 h
Value type: EC50
Value: 28 mg/l

12.2. Persistence and degradability

Persistence:

No data available

Biodegradability:

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Bioaccumulation:

Bioaccumulation is not expected.

12.4. Mobility in soil

Mobility Remarks: The product is mobile in water environment.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: No information available.

12.6. Other adverse effects

Additional ecological information:

All numerical values for ecotoxicity effects are calculated on the pure substances. Do not flush into surface water or sanitary sewer system.



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13. Disposal considerations

13.1. Waste treatment methods

Product: Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging: Empty contaminated packaging's thoroughly. They can be recycled after thorough and proper cleaning. Packaging's that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste Catalogue: No waste code according to the European Waste Catalogue Number can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14. Transport information

14.1. UN number (Sodium hypochlorite) 1791

14.2. UN proper shipping name

ADR:	HYPOCHLORITE SOLUTION
RID:	HYPOCHLORITE SOLUTION
IMDG:	HYPOCHLORITE SOLUTION

14.3. Transport hazard class(es)

ADR-Class:	8
(Labels; Classification Code; Hazard	8; C9; 80; (E) identification No; Tunnel restriction code)
RID-Class:	8
(Labels; Classification Code; Hazard	8; C9; 80 identification No)
IMDG-Class :	8
(Labels; EmS)	8; F-A, S-B

14.4. Packaging group

ADR:	III
RID:	III
IMDG:	III

14.5. Environmental hazards

Labeling according to 5.2.1.8 ADR:	Fish and tree
Labeling according to 5.2.1.8 RID:	Fish and tree
Labeling according to 5.2.1.6.3 IMDG:	Fish and tree
Classification as environmentally:	yes
hazardous according to 2.9.3 IMDG	

14.6. Special precautions for user

Note: not applicable.

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

IMDG: Not applicable.



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15. Regulatory Information

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

Any existing national regulations on the handling of irritant or corrosive substances must be observed.

National provisions:

Relevant Statutory Instruments

- Carriage of Dangerous Goods by Road Regulations 2007, S.I. 288 of 2007
- Carriage of Dangerous Goods by Road (ADR miscellaneous provisions) Regulations 2007, S.I.289 of 2007
- Carriage of Dangerous Goods by Road Act 1998 (Appointment of Competent Authorities) Order 2007, S.I.290 of 2007
- Carriage of Dangerous Goods by Road Act 1998 (Fees) Regulations 2007, S.I. 291 of 2007
- Chemicals Act 2008, No. 13 of 2008
- ADR 2011
- Safety, Health and Welfare at Work (Chemical Agents) Regulation 2001, SI 619 of 2001

16. Other information

16.1 Relevant phrases

Full text of R-phrases referred to under sections 2 and 3.

- R31 Contact with acids liberates toxic gas.
R34 Causes burns.
R50 Very toxic to aquatic organisms.

Full text of H-Statements referred to under sections 2 and 3.

- H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.

This data is based on our current knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

41.1.10

- Training hints

Further information regarding the directions for use can be found in the Product Data Sheet.

- Classification according to Regulation (EC) No 1272/2008

The classification includes the relevant available information about the mixture or the substances contained therein.

The evaluation of the available information within the scope of classification refers to the forms and aggregate states in which the mixture has been placed on the market and will be used most likely.

- **Contact for technical information:** support@benzsoftwash.com

- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative



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ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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

Further information

The information contained in this data sheet is copied from the safety data sheet provided by the manufacturer. The information is given in good faith and to the best of our knowledge but no guarantee, implied or otherwise, is made.