

# James Law (Chemicals) LTD

## SAFETY DATA SHEET

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

#### 1.1. Product identifier

**Trade name or designation of the mixture** Bleach (Standard)  
**Registration number** -  
**Synonyms** Sodium Hypochlorite Solution - Active Chlorine 3.5% - 4.9% \*  
**Issue date** 15-July-2015 Revision date:01/11/2019  
**Version number** 02

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

**Identified uses** Preparatory and cleaning products  
**Uses advised against** No other uses are advised.

#### 1.3. Details of the supplier of the safety data sheet

UK

**Company name** James Law (Chemicals Ltd)  
**Address** Crossley Street Works  
Royal Street, Smallbridge  
Rochdale OL16 2QA  
UK  
**Telephone** +44(0)1706 644940  
**Fax** +44(0)1706 644037  
**e-mail** sales@jameslawchemicals.com

**Website** www.jameslawchemicals.com

**1.4 Emergency telephone number** +44(0)1706 644940

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Physical hazards

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

##### Health hazards

Skin corrosion/irritation Category 1B H314 - Causes severe skin burns and eye damage.

##### Environmental hazards

Hazardous to the aquatic environment, acute aquatic hazard Category 1 H400 - Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term aquatic hazard Category 2 H411 - Toxic to aquatic life with long lasting effects.

#### Hazard summary

Causes burns. Do not breathe dust/fume/gas/mist/vapors/spray. Contact with acids liberates toxic gas. Very toxic to aquatic organisms. May be corrosive to metals.

#### 2.2. Label elements

##### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Sodium Hypochlorite (14-15% active chlorine)

**Hazard pictograms**



**Signal word** Danger

**Hazard statements**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H400 Very toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

P102 Keep out of reach of children.  
P103 Read label before use.  
P234 Keep only in original container.  
P260 Do not breathe mist or vapour.  
P264 Wash skin thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P101 If medical advice is needed, have product container or label at hand.  
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/doctor.  
P321 Specific treatment (see this label).  
P363 Wash contaminated clothing before reuse.  
P390 Absorb spillage to prevent material damage.

**Storage**

P405 Store locked up.  
P406 Store in corrosive resistant container with a resistant inner liner.

**Disposal**

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

**Supplemental label information**

EUH031 - Contact with acids liberates toxic gas.  
EUH206 - Warning! Do not use together with other products. May release dangerous gases (chlorine).

**2.3. Other hazards** None known.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Sodium Hypochlorite (14-15% active chlorine)	30 - 40	7681-52-9 231-668-3	01-2119488154-34-XXXX	017-011-00-1	
<b>Classification:</b>					
	<b>CLP:</b>	Met. Corr. 1;H290, Skin Corr. 1B;H314, Aquatic Acute 1;H400, Aquatic Chronic 2;H411			B

**List of abbreviations and symbols that may be used above**

CLP: Regulation No. 1272/2008.

#: This substance has been assigned Community workplace exposure limit(s).

Note B: Refer to CLP Regulation 1272/2008, section 1.1.3.1 (Notes relating to the identification, classification and labelling of substances)

**Composition comments** The full text for all H-phrases is displayed in section 16.

## SECTION 4: First aid measures

<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
<b>4.1. Description of first aid measures</b>	
<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.
<b>Ingestion</b>	Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

<b>General fire hazards</b>	Non-combustible, substance itself does not burn.
<b>5.1. Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>5.2. Special hazards arising from the substance or mixture</b>	During fire, gases hazardous to health may be formed.
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Special fire fighting procedures</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.
<b>For emergency responders</b>	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
<b>6.2. Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.
<b>6.3. Methods and material for containment and cleaning up</b>	<p>Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapours or divert vapour cloud drift. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use.</p>
<b>6.4. Reference to other sections</b>	For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Do not breathe mist or vapour. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
- 7.2. Conditions for safe storage, including any incompatibilities** Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).
- 7.3. Specific end use(s)** Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

- Occupational exposure limits** No exposure limits noted for ingredient(s).
- Biological limit values** No biological exposure limits noted for the ingredient(s).
- Recommended monitoring procedures** Follow standard monitoring procedures.
- Derived no-effect level (DNEL)**

Components	Type	Route	Value	Form
Sodium Hypochlorite (14-15% active chlorine) (CAS 7681-52-9)	Consumer	Dermal	0,5 %	in mixture (weight basis)
		Inhalation	3,1 mg/m <sup>3</sup>	Short term - systemic & local effects
		Inhalation	1,55 mg/m <sup>3</sup>	Long term - systemic & local effects
		Oral	0,26 mg/kg bw/day	repeat dose toxicity

### Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
Sodium Hypochlorite (14-15% active chlorine) (CAS 7681-52-9)	Not applicable	STP	4,69 mg/l	
		Water	0,21 µg/l	Fresh water
		Water	0,042 ug/l	marine water

### 8.2. Exposure controls

- Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

### Individual protection measures, such as personal protective equipment

- General information** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
- Eye/face protection** Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.
- Skin protection**
- **Hand protection** For prolonged or repeated skin contact use suitable protective gloves.
  - **Other** Wear appropriate chemical resistant clothing.
- Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.
- Thermal hazards** Not applicable.

- Hygiene measures** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

- Environmental exposure controls** Inform appropriate managerial or supervisory personnel of all environmental releases.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

## Appearance

Physical state	Liquid.
Form	Aqueous solution.
Colour	Colourless to light yellow.
Odour	Slight chlorine.
Odour threshold	Not applicable
pH	12,0 estimated
Melting point/freezing point	0 °C (32 °F) approx
Initial boiling point and boiling range	100 °C (212 °F) approx.
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not applicable
Flammability limit - upper (%)	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Relative density	Not available.
<b>Solubility(ies)</b>	
Solubility (water)	Miscible
Solubility (other)	Not available.
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not available
Explosive properties	Not applicable
Oxidizing properties	Not applicable
<b>9.2. Other information</b>	
Density	1.06 g/cm <sup>3</sup> estimated

## SECTION 10: Stability and reactivity

10.1. Reactivity	May be corrosive to metals.
10.2. Chemical stability	Stability of the solution decreases under the action of heat, light, and in the presence of impurities (traces of iron, nickel, copper, cobalt, aluminium, manganese)
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures above 25 °C. Contact with incompatible materials.
10.5. Incompatible materials	Avoid contact with acids and oxidising substances. Strong oxidising agents. Metals. This product reacts with acids.
10.6. Hazardous decomposition products	Chlorine, Hypochlorous acid, Sodium chlorate

## SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.

**Symptoms** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

### 11.1. Information on toxicological effects

Components	Species	Test results
Sodium Hypochlorite (14-15% active chlorine) (CAS 7681-52-9)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Mouse	5800 mg/kg
	Rat	8.91 g/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.
<b>Respiratory sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.
<b>Mixture versus substance information</b>	No information available.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Components	Species	Test results
Sodium Hypochlorite (14-15% active chlorine) (CAS 7681-52-9)		
<b>Aquatic</b>		
Fish	LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss)	0.03 - 0.07 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

<b>12.2. Persistence and degradability</b>	The product solely consists of inorganic compounds which are not biodegradable.
<b>12.3. Bioaccumulative potential</b>	No data available.
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	The product is miscible with water. May spread in water systems.
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.
<b>12.6. Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN1791
<b>14.2. UN proper shipping name</b>	Hypochlorite Solution
<b>14.3. Transport hazard class(es)</b>	
Class	8
Subsidiary risk	-
Label(s)	8
Hazard No. (ADR)	80
Tunnel restriction code	E
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	Yes
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### RID

<b>14.1. UN number</b>	UN1791
<b>14.2. UN proper shipping name</b>	Hypochlorite Solution
<b>14.3. Transport hazard class(es)</b>	
Class	8
Subsidiary risk	-
Label(s)	8
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	Yes
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### ADN

<b>14.1. UN number</b>	UN1791
<b>14.2. UN proper shipping name</b>	Hypochlorite solution
<b>14.3. Transport hazard class(es)</b>	
Class	8
Subsidiary risk	-
Label(s)	8
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	Yes
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### IATA

<b>14.1. UN number</b>	UN1791
<b>14.2. UN proper shipping name</b>	Hypochlorite solution

### 14.3. Transport hazard class(es)

Class 8

Subsidiary risk -

14.4. Packing group II

14.5. Environmental hazards Yes

ERG Code 8L

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

#### Other information

Passenger and cargo aircraft Allowed.

Cargo aircraft only Allowed.

### IMDG

14.1. UN number UN1791

14.2. UN proper shipping name Hypochlorite Solution

### 14.3. Transport hazard class(es)

Class 8

Subsidiary risk -

14.4. Packing group II

14.5. Environmental hazards

Marine pollutant Yes (P)

EmS F-A, S-B

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

ADN; ADR; IATA; IMDG; RID



Marine pollutant



## SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.



**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

**Authorisations****Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

**Restrictions on use****Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use**

Not regulated.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not listed.

**Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding.**

Not regulated.

**Other EU regulations****Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not regulated.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.**

Sodium Hypochlorite (14-15% active chlorine) (CAS 7681-52-9)

**Directive 94/33/EC on the protection of young people at work**

Sodium Hypochlorite (14-15% active chlorine) (CAS 7681-52-9)

**Other regulations**

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product is classified and labelled in accordance with EC directives or respective national laws. Additional information is given in the Material Safety Data Sheet.

**National regulations**

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## SECTION 16: Other information

<b>List of abbreviations</b>	Not available.
<b>References</b>	Not available.
<b>Information on evaluation method leading to the classification of mixture</b>	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
<b>Full text of any statements or R-phrases and H-statements under Sections 2 to 15</b>	<p>H290 May be corrosive to metals.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H400 Very toxic to aquatic life.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>
<b>Revision information</b>	None.
<b>Training information</b>	Follow training instructions when handling this material.
<b>Disclaimer</b>	<p>The information in the sheet was written based on the best knowledge and experience currently available.</p> <p>MANUFACTURER DISCLAIMER: The information given within this SDS is correct to the best of our knowledge, information and belief at the date of its revision and publication. However, the manufacturer makes no representation, warranty or guarantee as to its accuracy, reliability or completeness, nor assumes any liability for its use. It is the user's responsibility to confirm in advance that the information is current, applicable and suitable to their circumstances for each particular use. No representative of ours has authority to waive this provision. Please call for document accuracy if the revision date has exceeded 3 years.</p>