

# Safety Data Sheet

According to SS586:2014

Clorox Bleach - Lemon Fresh

Version 1.0

Issue date:10/10/2014

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SDS Record Number: CSSS-TCO-010-115559

## Section 1 Identification of the substance/mixture and of the company/undertaking

### Product identifier:

Identification on the label/Trade name: Clorox Bleach - Lemon Fresh

Additional identification: Not available

Identification of the product: See section 3

Index Number: Not available

REACH registration No.: Not available

### Relevant identified uses of the substance and uses advised against:

#### Identified uses:

Liquid laundry additive Bleach.

#### Uses advised against:

Not available.

### Details of the supplier of the safety data sheet:

Supplier(Manufacturer): The Clorox Company

Address: 1221 Broadway Oakland, CA 94612 USA

Contact person(E-mail): -

Telephone: 1-510-271-7000

Fax: -

### Emergency telephone Number:

For Medical Emergencies call: 1-800-446-1014

Transportation Emergencies, call Chemtrec: 1-800-424-9300

Available outside office hours? YES  NO

## Section 2 Hazards Identification

### Classification of the substance/mixture:

<b>GHS Classification</b>	serious eye damage/eye irritation	Category 2A
	hazardous to the aquatic environment- ACUTE	Category 1
	hazardous to the aquatic environment- CHRONIC	Category 1

### label elements:

#### Hazard Pictograms:



**Signal Word(S):** Warning

**Hazard Statement:** Causes serious eye irritation.

**Precautionary statement:**

Very toxic to aquatic life with long lasting effects.

Wash hands thoroughly after handling.

Avoid release to the environment.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Collect spillage.

Dispose of contents/container in according with local regulation.

**Other hazards:**

Not available.

**Section 3 Composition/information on ingredients****Substance/Mixture:**

Mixture

**Ingredient(s):**

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Sodium hypochlorite	N/A	7681-52-9	231-668-3	1-5%
Sodium chloride	N/A	7647-14-5	231-598-3	1-5%

**Section 4 First aid measures****Description of first aid measures:**

In all cases of doubt, or when symptoms persist, seek medical attention.

**In case of inhalation:**

Move to fresh air. If symptoms persist, call a physician. If breathing has stopped, contact emergency medical services immediately. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Administer oxygen if breathing is difficult and you are trained. Delayed pulmonary edema may occur. Get medical attention immediately if symptoms occur.

**In case of skin contact:**

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention immediately if symptoms occur.

**In case of eyes contact:**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

**In case of ingestion:**

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

**Most important symptoms and effects, both acute and delayed:**

Causes serious eye irritation.

**Indication of any immediate medical attention and special treatment needed:**

Treat symptomatically.

## Section 5 Fire-Fighting measures

### Extinguishing media:

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** Use of water spray when fighting fire may be inefficient.

### Special hazards arising from the substance or mixture

Carbon oxides.

### Special fire fighting methods and special protective actions for fire-fighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

**For non-emergency personnel:** Avoid contact with eyes. Use personal protective equipment as required.

**For emergency responders:** Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

### Environmental Precautions:

Do not allow material to contaminate ground water system. Prevent product from entering drains.

### Methods for Containment and Cleaning up:

Prevent further leakage or spillage if safe to do so. Collect and transfer to properly labeled containers.

### 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 information on disposal.

### Additional information:

Not applicable.

## Section 7 Handling and storage

### Precautions for safe handling:

**Protective measures:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

**Advice on general occupational hygiene:** Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

### Conditions for safe storage, including any incompatibilities:

Keep containers tightly closed in a dry, cool and well-ventilated place.

### Specific end use(s):

Not applicable.

## Section 8 Exposure Controls/Personal Protection

### Control parameters:

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

##### INGREDIENT DATA:

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Singapore Permissible Exposure Limits of Toxic Substances	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

##### EMERGENCY LIMITS:

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
Singapore	Not Available	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
Sodium hypochlorite	Not Available	Not Available
Sodium chloride	Not Available	Not Available

#### Exposure controls:

**Appropriate engineering controls:** Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment.

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

**Eye/face protection:** If splashes are likely to occur: Wear safety glasses with side shields (or goggles).  
None required for consumer use.

**Hand protection:** Wear protective gloves.

**Body protection:** Wear protective clothing.

**Respiratory protection:** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Thermal hazards:** Wear suitable protective clothing to prevent heat.

**Environmental exposure controls:** According to local regulations, Federal and official regulations.

## Section 9 Physical and chemical properties

#### Information on basic physical and chemical properties:

**Appearance:** Liquid

**Colour:** Clear Pale yellow

**Odour:** Lemon Citrus Bleach

**Odour threshold:** Not available

**pH:** 12.5

**Melting point/range (°C):** Not available

**Boiling point/range (°C):** Not available

**Flash point (°C):** Not available

**Evaporation rate:** Not available

**Flammability limit - lower (%):** Not available

**Flammability (solid, gas):** Not available

**Ignition temperature (°C):** Not available

**Upper/lower flammability/explosive limits:** Not available

**Vapour pressure (20°C):** Not available

**Vapour density:** Not available

**Density:** Not available

**Bulk density (kg/m<sup>3</sup>):** Not available

**Water solubility (g/l):** Soluble in water.

**n-Octanol/Water (log Po/w):** Not available

**Auto-ignition temperature:** Not available

**Decomposition temperature:** Not available

<b>Viscosity, dynamic (mPa.s):</b>	Not available
<b>Explosive properties:</b>	Not available
<b>Oxidising properties:</b>	Not available
<b>Molecular Formula:</b>	Not available
<b>Molecular Weight:</b>	Not available
<b>Other information:</b>	
<b>Fat solubility(solvent– oil to be specified) etc:</b>	Not available
<b>Surface tension:</b>	Not available
<b>Dissociation constant in water( pKa):</b>	Not available
<b>Oxidation-reduction Potential:</b>	Not available
<b>Specific gravity:</b>	Not available

## Section 10 Stability and reactivity

<b>Reactivity:</b>	The substance is stable under normal storage and handling conditions.
<b>Chemical stability:</b>	Stable at room temperature in closed containers under normal storage and handling conditions.
<b>Possibility of hazardous reactions:</b>	No dangerous reactions known.
<b>Conditions to avoid:</b>	Exposure to air or moisture over prolonged periods.
<b>Incompatible materials:</b>	Acids. Bases. Oxidizing agent.
<b>Hazardous decomposition products:</b>	Carbon oxides.

## Section 11 Toxicological information

### Toxicokinetics, metabolism and distribution:

**Non-human toxicological data:** Not available

### Information on toxicological effects:

#### Acute toxicity:

Sodium hypochlorite (CAS# 7681-52-9)

**LD50(Oral, Rat):** 8200 mg/kg

**LD50(Dermal, Rabbit):** > 10000 mg/kg

**LC50(Inhalation, Rat):** Not available

Sodium chloride (CAS# 7647-14-5)

**LD50(Oral, Rat):** 3 g/kg

**LD50(Dermal, Rabbit):** Not available

**LC50(Inhalation, Rat):** > 42 g/m<sup>3</sup> 1 h

**Skin corrosion/Irritation:** Not classified

**Serious eye damage/irritation:** Causes serious eye irritation.

**Respiratory or skin sensitization:** Not classified

**Germ cell mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive toxicity:** Not classified

**STOT- single exposure:** Not classified

**STOT-repeated exposure:** Not classified

## Section 12 Ecological information

### Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

<b>Persistence and degradability:</b>	Not available.
<b>Bioaccumulative potential:</b>	Not available.
<b>Mobility in soil:</b>	Not available.
<b>Results of PBT&amp;vPvB assessment:</b>	Not available.
<b>Other adverse effects:</b>	Very toxic to aquatic life with long lasting effects.

## Section 13 Disposal considerations

<b>Waste treatment methods:</b>	The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.
<b>Product / Packaging disposal:</b>	If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

## Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
<b>UN-Number</b>	3082	3082	3082
<b>UN Proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s.	Environmentally hazardous substance, liquid, n.o.s.	Environmentally hazardous substance, liquid, n.o.s.
<b>Transport hazard Class</b>	9	9	9
<b>Packaging group</b>	III	III	III
<b>Environmental hazards</b>	Yes	Yes	Yes
<b>Special precautions for user</b>	See section 2.2	See section 2.2	See section 2.2
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	IBC03	IBC03	IBC03

## Section 15 Regulation information

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

<b>Sodium hypochlorite</b>	"Singapore Permissible Exposure Limits of Toxic Substances","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs".
<b>Sodium chloride</b>	Not available.

## Section 16 Other information

**Further information:**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to reader:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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