

**SAFETY DATA SHEET****Clorox® Bleach Lemon Fresh**

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

**Product name** Clorox® Bleach Lemon Fresh  
**Product number** CX0031HU, CX0042HU, CX0043HU

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

**Identified uses** Bleach  
**Uses advised against** No specific uses advised against are identified.

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

**Supplier** CBee (Europe) Ltd.  
Eton House  
2nd Floor  
18 - 24 Paradise Road  
Richmond  
TW9 1SE  
UK  
Tel: + 44 (0) 208 614 7120  
Fax: + 44 (0) 208 940 2040  
consumerservices@clorox.co.uk

**1.4. Emergency telephone number**

**Emergency telephone** +44 (0) 208 614 7120  
Monday - Thursday:- 09:00 - 17:30  
Friday:- 09:00 - 17:00

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification****Physical hazards**

Not Classified

**Health hazards**

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

**Environmental hazards**

Aquatic Acute 1 - H400

**Classification (67/548/EEC or 1999/45/EC)**

Xi; R36/38. N; R50

**2.2. Label elements****Pictogram**

Signal word



Warning

## Clorox® Bleach Lemon Fresh

### Hazard statements

H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H400 Very toxic to aquatic life.

### Precautionary statements

P102 Keep out of reach of children.  
 P264 Wash contaminated skin thoroughly after handling.  
 P280 Wear eye protection.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P501 Dispose of contents/container in accordance with national regulations.

### Supplemental label information

EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

### Contains

Sodium hypochlorite, solution 4.8 % Cl active

### Detergent labelling

< 5% chlorine-based bleaching agents, < 5% perfumes

### Supplementary precautionary statements

P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P391 Collect spillage.

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>Sodium hypochlorite, solution ... % Cl active</b> <b>CAS number:</b> 7681-52-9 <b>EC number:</b> 231-668-3 <b>M factor (Acute) = 10</b>	<b>4.8%</b>
<b>Classification</b> Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400	<b>Classification (67/548/EEC or 1999/45/EC)</b> C; R34. N; R50. R31
<b>sodium hydroxide</b> <b>CAS number:</b> 1310-73-2 <b>EC number:</b> 215-185-5	<b>0.025 - &lt;0.25%</b>
<b>Classification</b> Skin Corr. 1A - H314 Eye Dam. 1 - H318	<b>Classification (67/548/EEC or 1999/45/EC)</b> C; R35

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

#### Ingestion

## Clorox® Bleach Lemon Fresh

Rinse mouth thoroughly with water. Give plenty of water to drink. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

### **Skin contact**

Wash skin thoroughly with soap and water.

### **Eye contact**

Remove any contact lenses and open eyelids wide apart. Continue to rinse.

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

### **Inhalation**

Irritation of nose, throat and airway.

### **Ingestion**

May cause discomfort if swallowed.

### **Skin contact**

Skin irritation.

### **Eye contact**

Irritation of eyes and mucous membranes. Prolonged contact may cause redness and/or tearing.

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

### **Notes for the doctor**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

#### **Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire.

### **5.2. Special hazards arising from the substance or mixture**

#### **Hazardous combustion products**

Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

### **5.3. Advice for firefighters**

#### **Special protective equipment for firefighters**

Use protective equipment appropriate for surrounding materials.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **Personal precautions**

Wear protective clothing as described in Section 8 of this safety data sheet.

### **6.2. Environmental precautions**

#### **Environmental precautions**

Contain spillage with sand, earth or other suitable non-combustible material. Avoid discharge into drains or watercourses or onto the ground.

### **6.3. Methods and material for containment and cleaning up**

#### **Methods for cleaning up**

Neutralise spilled material with diluted hydrochloric acid. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

### **6.4. Reference to other sections**

## Clorox® Bleach Lemon Fresh

### Reference to other sections

See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

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## SECTION 7: Handling and storage

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### 7.1. Precautions for safe handling

#### Usage precautions

Read and follow manufacturer's recommendations.

#### Advice on general occupational hygiene

Avoid contact with eyes and prolonged skin contact.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage precautions

Store in a cool and well-ventilated place.

### 7.3. Specific end use(s)

#### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

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## SECTION 8: Exposure Controls/personal protection

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### 8.1. Control parameters

#### Occupational exposure limits

##### sodium hydroxide

Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

### 8.2. Exposure controls

#### Eye/face protection

Wear chemical splash goggles.

#### Hygiene measures

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

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## SECTION 9: Physical and Chemical Properties

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

#### Appearance

Clear liquid.

#### Colour

Colourless to pale yellow.

#### Odour

Citrus.

#### Odour threshold

Not determined.

#### pH

pH (concentrated solution): 12.5

#### Melting point

Not relevant.

#### Initial boiling point and range

Not determined.

#### Flash point

Not determined.

#### Evaporation rate

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Not determined.

### Evaporation factor

Not determined.

### Flammability (solid, gas)

Not relevant.

### Upper/lower flammability or explosive limits

Not relevant.

### Vapour pressure

Not determined.

### Vapour density

Not relevant.

### Relative density

1.05

### Bulk density

Not determined.

### Solubility(ies)

Soluble in water.

### Partition coefficient

Not determined.

### Auto-ignition temperature

Not relevant.

### Decomposition Temperature

Not relevant.

### Viscosity

Not determined.

### Explosive properties

Not considered to be explosive.

### Oxidising properties

The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

## 9.2. Other information

### Other information

No information required.

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Acids. Alkalis. Oxidising materials.

### 10.2. Chemical stability

#### Stability

Stable at normal ambient temperatures and when used as recommended.

### 10.3. Possibility of hazardous reactions

Will not polymerise.

### 10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

#### Materials to avoid

Avoid contact with strong oxidising agents. Acids.

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### **10.6. Hazardous decomposition products**

None at ambient temperatures. Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen. Chlorides.

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## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

#### **Acute toxicity - oral**

Based on available data the classification criteria are not met.

#### **Acute toxicity - dermal**

Based on available data the classification criteria are not met.

#### **Acute toxicity - inhalation**

Based on available data the classification criteria are not met.

#### **Skin corrosion/irritation**

##### **Animal data**

Dose: 0.5 ml, Rabbit, Skin Irrit. 2 - H315 Causes skin irritation.

#### **Serious eye damage/irritation**

Dose: 0.1 ml, 1 second, Rabbit Eye Irrit. 2 - H319 May cause severe eye irritation.

#### **Respiratory sensitisation**

Based on available data the classification criteria are not met.

#### **Skin sensitisation**

Based on available data the classification criteria are not met.

#### **Germ cell mutagenicity**

##### **Genotoxicity - in vitro**

Based on available data the classification criteria are not met.

##### **Genotoxicity - in vivo**

Based on available data the classification criteria are not met.

#### **Carcinogenicity**

Based on available data the classification criteria are not met.

#### **Reproductive toxicity**

##### **Reproductive toxicity - fertility**

Based on available data the classification criteria are not met.

##### **Reproductive toxicity - development**

Based on available data the classification criteria are not met.

#### **Specific target organ toxicity - single exposure**

##### **STOT - single exposure**

Based on available data the classification criteria are not met.

#### **Specific target organ toxicity - repeated exposure**

##### **STOT - repeated exposure**

Based on available data the classification criteria are not met.

#### **Aspiration hazard**

Not anticipated to present an aspiration hazard, based on chemical structure.

#### **Toxicological information on ingredients.**

##### **Sodium hypochlorite, solution ... % Cl active**

##### **Acute toxicity - oral**

##### **Acute toxicity oral (LD50 mg/kg)**

8,830.0

##### **Species**

**Clorox® Bleach Lemon Fresh**

Rat

REACH dossier information. Based on available data the classification criteria are not met.

**ATE oral (mg/kg)**

8,830.0

**Acute toxicity - dermal****Acute toxicity dermal (LD50 mg/kg)**

20000.0

**Species**

Rabbit

REACH dossier information. Based on available data the classification criteria are not met.

**ATE dermal (mg/kg)**

20000.0

**Acute toxicity - inhalation**

Based on available data the classification criteria are not met.

**Skin corrosion/irritation****Animal data**

Dose: 5.3%, 4 hours, Rabbit Primary dermal irritation index: 1.2 Dose: 0.5 ml (12.5%), 24 hours, Rabbit Erythema/eschar score: Well defined erythema (2). Oedema score: Very slight oedema - barely perceptible (1). REACH dossier information. Corrosive to skin.

**Serious eye damage/irritation**

Dose: 0.1 g, 1 second, Rabbit REACH dossier information. Corrosivity to eyes is assumed.

**Skin sensitisation**

Buehler test - Guinea pig: Not sensitising. REACH dossier information.

**Germ cell mutagenicity****Genotoxicity - in vitro**

Chromosome aberration: Negative. REACH dossier information.

**Genotoxicity - in vivo**

Chromosome aberration: Negative. REACH dossier information.

**Carcinogenicity**

NOAEL &gt; 13.75 mg/kg/day, Oral, Rat REACH dossier information.

**IARC carcinogenicity**

IARC Group 3 Not classifiable as to its carcinogenicity to humans.

**Reproductive toxicity****Reproductive toxicity - fertility**

One-generation study - NOAEL &gt; 5 mg/kg/day, Oral, Rat P REACH dossier information.

**Reproductive toxicity - development**

Teratogenicity: - NOAEL: &gt;=5.7 mg/kg/day, Oral, Rat REACH dossier information.

**Specific target organ toxicity - repeated exposure****STOT - repeated exposure**

LOAEL 100 mg/kg/day, Oral, Rat REACH dossier information.

**Aspiration hazard**

Not anticipated to present an aspiration hazard, based on chemical structure.

**Clorox® Bleach Lemon Fresh****sodium hydroxide****Skin corrosion/irritation****Animal data**

Skin Corr. 1A - H314

**Serious eye damage/irritation**

Dose: 0.1 ml (2%), 1 second, Rabbit REACH dossier information.

**Skin sensitisation**

Patch test - Human: Not sensitising. REACH dossier information.

**Aspiration hazard**

Not anticipated to present an aspiration hazard, based on chemical structure.

**SECTION 12: Ecological Information****12.1. Toxicity**

Aquatic Acute 1 - H400 Very toxic to aquatic life.

**Ecological information on ingredients.****Sodium hypochlorite, solution ... % Cl active****Acute aquatic toxicity****LE(C)<sub>50</sub>**

0.01 < L(E)C<sub>50</sub> ≤ 0.1

**M factor (Acute)**

10

**Acute toxicity - fish**

LC<sub>50</sub>, 96 hours: 0.032 mg/l, Oncorhynchus kisutch (Coho salmon) REACH dossier information.

**Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 48 hours: 0.141 mg/l, Daphnia magna REACH dossier information.

**Acute toxicity - microorganisms**

EC<sub>50</sub>, 3 hours: > 3 mg/l, Activated sludge REACH dossier information.

**Acute toxicity - terrestrial**

NOEC, 10 days: 200 mg/l, Coturnix coturnix japonica (Japanese quail) REACH dossier information.

**Chronic toxicity - fish early life stage**

NOEC, 28 days: 0.04 mg/l, Menidia peninsulae (Tidewater silverside) REACH dossier information.

**Chronic toxicity - aquatic invertebrates**

NOEC, 15 days: 0.007 mg/l, Freshwater invertebrates REACH dossier information.

**sodium hydroxide****Acute toxicity - fish**

LC<sub>50</sub>, 48 hours: 189 mg/l, Leuciscus idus (Golden orfe)

**Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 48 hours: 40.4 mg/l, Ceriodaphnia REACH dossier information.

**12.2. Persistence and degradability****Persistence and degradability**

The surfactant(s) contained in this product complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.



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### Ecological information on ingredients.

#### Sodium hypochlorite, solution ... % Cl active

##### Phototransformation

Air - DT<sub>50</sub> : 114.6 days Estimated value. Water - DT<sub>50</sub> : 12 minutes REACH dossier information.

### 12.3. Bioaccumulative potential

No data available on bioaccumulation.

##### Partition coefficient

Not determined.

### Ecological information on ingredients.

#### Sodium hypochlorite, solution ... % Cl active

##### Partition coefficient

log Pow: -3.42 Estimated value. REACH dossier information.

#### sodium hydroxide

The product is not bioaccumulating.

### 12.4. Mobility in soil

##### Mobility

The product is soluble in water.

### Ecological information on ingredients.

#### Sodium hypochlorite, solution ... % Cl active

##### Henry's law constant

0.076 @ 20°C Estimated value. REACH dossier information.

##### Surface tension

82.4 mN/m @ 20°C REACH dossier information.

### 12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

Not relevant.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

##### General information

When handling waste, the safety precautions applying to handling of the product should be considered. Dispose of waste product or used containers in accordance with local regulations

##### Disposal methods

Avoid the spillage or runoff entering drains, sewers or watercourses. Neutralise waste with diluted hydrochloric acid.

## **SECTION 14: Transport information**

### 14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
UN No. (ADN)	3082

### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
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**Clorox® Bleach Lemon Fresh**

<b>Proper shipping name (IMDG)</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
<b>Proper shipping name (ICAO)</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE)
<b>Proper shipping name (ADN)</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE)

**14.3. Transport hazard class(es)**

<b>ADR/RID class</b>	9
<b>ADR/RID classification code</b>	M6
<b>ADR/RID label</b>	9
<b>IMDG class</b>	9
<b>ICAO class/division</b>	9
<b>ADN class</b>	9

**Transport labels****14.4. Packing group**

<b>ADR/RID packing group</b>	III
<b>IMDG packing group</b>	III
<b>ICAO packing group</b>	III
<b>ADN packing group</b>	III

**14.5. Environmental hazards**

Environmentally hazardous substance/marine pollutant



Yes.

**14.6. Special precautions for user**

<b>EmS</b>	F-A, S-F
<b>ADR transport category</b>	3
<b>Emergency Action Code</b>	•3Z
<b>Hazard Identification Number (ADR/RID)</b>	90
<b>Tunnel restriction code</b>	(E)

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

EH40/2005 Workplace exposure limits.

**EU legislation**

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (as amended)

## Clorox® Bleach Lemon Fresh

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 (as amended).

### **15.2. Chemical safety assessment**

No chemical safety assessment has been carried out.

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### **SECTION 16: Other information**

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#### **Classification procedures according to Regulation (EC) 1272/2008**

Aquatic Acute 1 - H400: Calculation method. Eye Irrit. 2 - H319, Skin Irrit. 2 - H315: On basis of test data.

#### **Revision comments**

Classification according to CLP Annex I.

**Revision date** 01/04/2014

**Revision** 5

**Supersedes date** 01/10/2012

**SDS number** 128

#### **Risk phrases in full**

R31 Contact with acids liberates toxic gas.

R34 Causes burns.

R35 Causes severe burns.

R36/38 Irritating to eyes and skin.

R50 Very toxic to aquatic organisms.

#### **Hazard statements in full**

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

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