

**Safety data sheet**  
According to 1907/2006/EC, Article 31 REACH

Printing date 16.07.2018

Version: 2

Revision: 08.11.2016

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

· **1.1 Product identifier**

· **Trade name:** Zep Commercial Calcium, Lime & Rust Stain Remover

· **Article number:** 07740002

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

· **Sector of Use**

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU21 Consumer uses: Private households / general public / consumers

· **Application of the substance / the mixture** Cleaning agent

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

· **Manufacturer/Supplier:**

ZEP UK Ltd  
Tanhouse Lane  
Widnes Cheshire, WA8 0RD  
United Kingdom  
Tel: +44 (0)151 422 1000  
Fax: +44 (0)151 422 1011  
@: info@zep.co.uk  
web: www.zep.co.uk

ZEP Industries BV  
Vierlinghweg 30  
4612 PN Bergen op Zoom  
The Netherlands  
Tel: (NL) + 31 164 250 100 (B) + 32 2 347 0117  
Fax: (NL) + 31 164 266 710 (B) + 32 2 347 1395  
@: sales@zpebenelux.com

ZEP ITALIA SRL  
Via Netunese Km. 25.000  
04011 Aprilia (LT) - Italy  
Tel: +39.06.926691  
Fax: +39.06.92747061  
@: tecnico@zpeurope.com  
Sito: www.zep.it

· **Further information obtainable from:**

Customer Service  
NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710  
B: Tel: +32 2 347 0117 Fax: +32 2 347 1395  
IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61  
UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

· **1.4 Emergency telephone number:**

Customer Service  
NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710  
B: Tel: +32 2 347 0117 Fax: +32 2 347 1395  
IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61  
UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011  
EU: Tel. 112

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

(Contd. on page 2)

GB

# Safety data sheet

## According to 1907/2006/EC, Article 31 REACH

Printing date 16.07.2018

Version: 2

Revision: 08.11.2016

Trade name: Zep Commercial Calcium, Lime &amp; Rust Stain Remover

(Contd. of page 1)

### Hazard pictograms



GHS07

### Signal word Warning

#### Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

#### Precautionary statements

P102 Keep out of reach of children.

P260 Do not breathe spray.

P280 Wear protective gloves / 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.

P337+P313 If eye irritation persists: Get medical advice/attention.

#### Additional information:

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

#### 2.3 Other hazards The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.

#### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

#### Dangerous components:

CAS: 7664-38-2 EINECS: 231-633-2 Reg.nr.: 01-2119485924-24-xxxx	phosphoric acid Met. Corr. 1, H290; Skin Corr. 1B, H314	10-25%
CAS: 68439-45-2 Reg.nr.: Polymer	Alkyl Alcohol (C6-C12) ethoxylates Eye Dam. 1, H318 Acute Tox. 4, H302	1-2.5%

#### Ingredients according to Detergents Regulation 648/2004/EC

For the wording of the listed hazard phrases refer to section 16.

Nonionic surfactants	<5%
Perfumes (LINALOOL), LIMONENE	

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: In case of unconsciousness place patient stably in side position for transportation.

#### After skin contact:

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing agents: CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)

# Safety data sheet

## According to 1907/2006/EC, Article 31 REACH

Printing date 16.07.2018

Version: 2

Revision: 08.11.2016

**Trade name: Zep Commercial Calcium, Lime & Rust Stain Remover**

(Contd. of page 2)

- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Dilute with plenty of water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, universal binders).  
Ensure adequate ventilation.
- **6.4 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 disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

#### 7664-38-2 phosphoric acid (10-25%)

WEL (Great Britain)	Short-term value: 2 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
IOELV (European Union)	Short-term value: 2 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>

· **DNELs**

#### 7664-38-2 phosphoric acid

Inhalative	DNEL Long term local mg/m <sup>3</sup>	0.73 mg/m <sup>3</sup> (consumer) 2.92 mg/m <sup>3</sup> (worker)
------------	--	--

· **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not necessary if room is well-ventilated.

(Contd. on page 4)

GB

## Safety data sheet

### According to 1907/2006/EC, Article 31 REACH

Printing date 16.07.2018

Version: 2

Revision: 08.11.2016

**Trade name: Zep Commercial Calcium, Lime & Rust Stain Remover**

(Contd. of page 3)

· **Protection of hands:**



Protective gloves

Rubber gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Rubber gloves

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Eye protection:**



Safety glasses

Goggles recommended during refilling

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Green
<b>Odour:</b>	Pleasant

· **pH-value at 20 °C:** 2

· **Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	130 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapour pressure at 20 °C:** 23 hPa

· **Density at 20 °C:** 1.14 g/cm<sup>3</sup>

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:**

Fully miscible.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.

· **Solvent content:**

**Organic solvents:** 0.0 %

(Contd. on page 5)

# Safety data sheet

## According to 1907/2006/EC, Article 31 REACH

Printing date 16.07.2018

Version: 2

Revision: 08.11.2016

Trade name: Zep Commercial Calcium, Lime &amp; Rust Stain Remover

(Contd. of page 4)

· **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

#### · LD/LC50 values relevant for classification:

##### 7664-38-2 phosphoric acid

Oral	LD50	2600 mg/kg (Rat)
Dermal	LD50	2740 mg/kg (Rabbit)
	LC50 / 96 h	138 mg/ltr (blu)
		98-106 mg/ltr (fish)
	LC50/ 24 h	245 mg/ltr (Brachydanio rerio)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

(Contd. on page 6)

GB

## Safety data sheet

### According to 1907/2006/EC, Article 31 REACH

Printing date 16.07.2018

Version: 2

Revision: 08.11.2016

Trade name: Zep Commercial Calcium, Lime &amp; Rust Stain Remover

(Contd. of page 5)

- **Uncleaned packaging:**
- **Recommendation:** Disposal in accordance with administrative provisions

#### SECTION 14: Transport information

<ul style="list-style-type: none"> <li>· 14.1 UN-Number</li> <li>· ADR, IMDG, IATA</li> </ul>	UN1805	
<ul style="list-style-type: none"> <li>· 14.2 UN proper shipping name</li> <li>· ADR</li> <li>· IMDG, IATA</li> </ul>	1805 PHOSPHORIC ACID, SOLUTION PHOSPHORIC ACID, SOLUTION	
<ul style="list-style-type: none"> <li>· 14.3 Transport hazard class(es)</li> <li>· ADR</li> </ul>	<div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	8 (C1) Corrosive substances. 8
<ul style="list-style-type: none"> <li>· IMDG, IATA</li> </ul>	<div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	8 Corrosive substances. 8
<ul style="list-style-type: none"> <li>· 14.4 Packing group</li> <li>· ADR, IMDG, IATA</li> </ul>	III	
<ul style="list-style-type: none"> <li>· 14.5 Environmental hazards:</li> <li>· Marine pollutant:</li> </ul>	No	
<ul style="list-style-type: none"> <li>· 14.6 Special precautions for user</li> <li>· Danger code (Kemler):</li> <li>· EMS Number:</li> </ul>	Warning: Corrosive substances. 80 F-A,S-B	
<ul style="list-style-type: none"> <li>· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</li> </ul>	Not applicable.	
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> </ul>		
<ul style="list-style-type: none"> <li>· ADR</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml	
<ul style="list-style-type: none"> <li>· Transport category</li> <li>· Tunnel restriction code</li> </ul>	3 E	
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml	
<ul style="list-style-type: none"> <li>· UN "Model Regulation":</li> </ul>	UN1805, PHOSPHORIC ACID, SOLUTION, 8, III	

#### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

(Contd. on page 7)

**Safety data sheet**  
According to 1907/2006/EC, Article 31 REACH

Printing date 16.07.2018

Version: 2

Revision: 08.11.2016

**Trade name: Zep Commercial Calcium, Lime & Rust Stain Remover**

(Contd. of page 6)

- **National regulations:**
- **Waterhazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

### SECTION 16: Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Relevant phrases**

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

- **Department issuing SDS:**

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

B: Tel: +32 2 347 0117 Fax: +32 2 347 1395

IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

- **Contact:**

Customer Service

NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

B: Tel: +32 2 347 0117 Fax: +32 2 347 1395

IT: Tel: +39 069 266 91 Fax: +39 06.927 470 61

UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

- **Abbreviations and acronyms:**

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)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

GB

(Contd. on page 8)

**Safety data sheet**  
According to 1907/2006/EC, Article 31 REACH

Printing date 16.07.2018

Version: 2

Revision: 08.11.2016

Trade name: Zep Commercial Calcium, Lime &amp; Rust Stain Remover

(Contd. of page 7)

### Annex: Exposure scenario

- **Short title of the exposure scenario**
- **Sector of Use**  
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)  
SU21 Consumer uses: Private households / general public / consumers
- **Description of the activities / processes covered in the Exposure Scenario** See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use**
- **Duration and frequency** 5 workdays/week.
- **Physical parameters**
- **Physical state** Fluid
- **Concentration of the substance in the mixture** The substance is main component.
- **Used amount per time or activity**  
According to directions for use.  
Smaller than 10 g per application.
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**  
Avoid contact with eyes.  
Avoid contact with the skin.
- **Other operational conditions affecting consumer exposure** No special measures required.
- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.
- **Risk management measures**
- **Worker protection**
- **Organisational protective measures** No special measures required.
- **Technical protective measures** Ensure that suitable extractors are available on processing machines
- **Personal protective measures**  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the skin.  
Avoid contact with the eyes.  
Tightly sealed goggles  
Protective gloves  
Rubber gloves  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
- **Water** No special measures required.
- **Disposal measures** Ensure that waste is collected and contained.
- **Disposal procedures** Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Waste type** Partially emptied and uncleaned packaging
- **Exposure estimation**
- **Consumer** Not relevant for this Exposure Scenario.
- **Guidance for downstream users** No further relevant information available.

GB