

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

Printing date 26.05.2016

Version: 4

Revision: 26.05.2016

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

· **1.1 Product identifier**

· **Trade name:** FS LIME REMOVER

· **Article number:** 93830001

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

· **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

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

· **Product category** PC35 Washing and cleaning products (including solvent based products)

· **Process category** PROC10 Roller application or brushing

· **Application of the substance / the mixture** Descalant

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

· **Manufacturer/Supplier:**

ZEP UK Ltd

PO Box 12 Tanhouse Lane

Widnes Cheshire, WA8 0RR

United Kingdom

Phone: +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@zepbenelux.com

ZEP ITALIA SRL

Via Netunese Km. 25.000

04011 Aprilia (LT) - Italy

Tel: +39.06.926691

Fax: +39.06.92747061

@: tecnico@zep.europa.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

SECTION 2: Hazards identification

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

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

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

· **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 26.05.2016

Version: 4

Revision: 26.05.2016

Trade name: FS LIME REMOVER

(Contd. of page 1)

Hazard pictograms

GHS05

Signal word Danger**Hazard-determining components of labelling:**

phosphoric acid
Alkoxyated fatty alcohol

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe vapours.

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.

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.

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

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	25-50%
	Alkoxyated fatty alcohol	Eye Dam. 1, H318 Aquatic Acute 1, H400	0.1-1%

Ingredients according to Detergents Regulation 648/2004/EC

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

Nonionic surfactants	< 5%
----------------------	------

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.

Immediately rinse with water.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.**After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.**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:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.

(Contd. on page 3)

Safety data sheet

According to 1907/2006/EC, Article 31 REACH

Printing date 26.05.2016

Version: 4

Revision: 26.05.2016

Trade name: FS LIME REMOVER

(Contd. of page 2)

- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, universal binders).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
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:** Keep respiratory protective device available.
- **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:** Keep receptacle tightly sealed.
- **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 (25-50%)

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

- **DNELs**

7664-38-2 phosphoric acid

Inhalative	DNEL Long term local mg/m ³	0.73 mg/m ³ (consumer) 2.92 mg/m ³ (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 eyes.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.

(Contd. on page 4)

GB

Safety data sheet

According to 1907/2006/EC, Article 31 REACH

Printing date 26.05.2016

Version: 4

Revision: 26.05.2016

Trade name: FS LIME 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.

· Not suitable are gloves made of the following materials: Strong material gloves**· Eye protection:**

Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties**· General Information****· Appearance:**

Form:	Liquid
Colour:	Colourless
· Odour:	Odourless
· Odour threshold:	Not determined.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C

· Flash point: Not applicable.**· Flammability (solid, gaseous):** Not applicable.**· Ignition temperature:****Decomposition temperature:** Not determined.**· Self-igniting:** Product is not selfigniting.**· Danger of explosion:** Product does not present an explosion hazard.**· Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure at 20 °C: 23 hPa

· Density at 20 °C:	1.249 g/cm ³
· 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:**

Dynamic:	Not determined.
Kinematic:	Not determined.

(Contd. on page 5)

Safety data sheet

According to 1907/2006/EC, Article 31 REACH

Printing date 26.05.2016

Version: 4

Revision: 26.05.2016

Trade name: FS LIME REMOVER

(Contd. of page 4)

- | | |
|--------------------------------|--|
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| · Solids content: | 28.9 % |
| · 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/ 24 h	245 mg/ltr (Brachydanio rerio)
	LC50 / 96 h	138 mg/ltr (blu)
		98-106 mg/ltr (fish)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **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 product to reach ground water, water course or sewage system, even in small quantities.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even extremely small quantities leak into the ground.
In accordance with the requirements of the RVO in the Act on Detergents and Cleansing Agents, tensides are biodegradable up to at least 90 %.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 6)

GB

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

Printing date 26.05.2016

Version: 4

Revision: 26.05.2016



Trade name: FS LIME REMOVER

(Contd. of page 5)

· **12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN3264
- **14.2 UN proper shipping name**
- **ADR** 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SOLUTION)
- **IMDG** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SOLUTION)
- **IATA** Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid solution)
- **14.3 Transport hazard class(es)**
- **ADR**
- 
- **Class** 8 (C1) Corrosive substances.
- **Label** 8
- **IMDG, IATA**
- 
- **Class** 8 Corrosive substances.
- **Label** 8
- **14.4 Packing group**
- **ADR, IMDG, IATA** III
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Warning: Corrosive substances.
- **Danger code (Kemler):** 80
- **EMS Number:** F-A,S-B
- **Segregation groups** Acids
- **Stowage Category** B
- **Stowage Code** SW2 Clear of living quarters.
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **Transport/Additional information:**
- **ADR**
- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
- **Transport category** 3
- **Tunnel restriction code** E

(Contd. on page 7)

GB

Safety data sheet

According to 1907/2006/EC, Article 31 REACH

Printing date 26.05.2016

Version: 4

Revision: 26.05.2016

Trade name: FS LIME REMOVER

(Contd. of page 6)

· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III

SECTION 15: Regulatory information

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

Reg. (EC) n. 1272/2008 - CLP;
 Reg. (EC) n. 1907/2006 – Reach;
 Reg. (EC) n. 2015/830 annex II of REACH;
 Reg. (EC) n. 648/04 (Detergents);
 Reg. (EC) n. 528/12 (Biocides BPR);
 Reg. (EC) n. 1223/2009 (Cosmetics);
 Dir. 06/08 ADR – RID - IMDG - IATA;
 Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);
 Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations:**

· **Waterhazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.
 · **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not 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.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H400 Very toxic to aquatic life.

· **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
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Met. Corr. 1: Corrosive to metals, Hazard Category 1
 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

(Contd. on page 8)

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

Printing date 26.05.2016

Version: 4

Revision: 26.05.2016

Trade name: FS LIME REMOVER

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
· * **Data compared to the previous version altered.**

(Contd. of page 7)

GB