

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : ZEP FS LIME REMOVER 55GL

Material number : 000000000000244585

**Manufacturer or supplier's details**

Company : Zep Inc.

Address : 1310 Seaboard Industrial Blvd., NW  
Atlanta, GA 30318

Telephone : 404-352-1680

**Emergency telephone numbers****For SDS Information** : Compliance Services 1-877-428-9937**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded**For a Transportation Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.  
In the District of Columbia 202-483-7616**Recommended use of the chemical and restrictions on use**

Recommended use : Specialty Cleaner and Remover

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance	liquid
Colour	colourless, clear
Odour	mild

**GHS Classification**

Skin corrosion : Category 1

Serious eye damage : Category 1

**GHS label elements**

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

**Disposal:**

Dispose of contents/container in accordance with local regulation.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration [%]
orthophosphoric acid	7664-38-2	>= 30 - < 50
Alcohols, C10-14, ethoxylated	66455-15-0	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

**SECTION 4. FIRST AID MEASURES**

- General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.  
Wash off immediately with plenty of water for at least 15 minutes.  
Remove contaminated clothing and shoes.  
Wash contaminated clothing before reuse.  
If skin irritation persists, call a physician.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

- |   |   |   |
|---|---|---|
| If swallowed  | : | Clean mouth with water and drink afterwards plenty of water.<br>Keep respiratory tract clear.<br>DO NOT induce vomiting unless directed to do so by a physician or poison control center.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Take victim immediately to hospital. |
| Most important symptoms and effects, both acute and delayed | : | Effects are immediate and delayed.<br>Symptoms may include blistering, irritation, burns, and pain.<br>Effects are dependent on exposure (dose, concentration, contact time).<br>Causes severe skin burns and eye damage.<br>Causes serious eye damage.<br>Review section 2 of SDS to see all potential hazards.                      |
| Notes to physician  | : | Treat symptomatically. Symptoms may be delayed.   |

---

**SECTION 5. FIREFIGHTING MEASURES**

- |   |   |   |
|---|---|---|
| Suitable extinguishing media                  | : | Dry chemical  |
| Unsuitable extinguishing media                | : | High volume water jet   |
| Specific hazards during firefighting          | : | Do not allow run-off from fire fighting to enter drains or water courses.                               |
| Hazardous combustion products                 | : | Carbon dioxide (CO <sub>2</sub> )<br>Carbon monoxide<br>Smoke<br>Phosphorus compounds                   |
| Specific extinguishing methods                | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Further information                           | : | Standard procedure for chemical fires.  |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary.                                  |

---

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- |   |   |   |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Use personal protective equipment.  |
| Environmental precautions   | : | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up               | : | Neutralize with chalk, alkali solution or ammonia.<br>Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).                            |

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

Keep in suitable, closed containers for disposal.

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Do not breathe vapours/dust.  
 Avoid contact with skin and eyes.  
 For personal protection see section 8.  
 Smoking, eating and drinking should be prohibited in the application area.  
 To avoid spills during handling keep bottle on a metal tray.  
 Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
 Observe label precautions.  
 Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.  
 Do not freeze.  
 Do not store near acids.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
orthophosphoric acid	7664-38-2	TWA	1 mg/m3	ACGIH
		STEL	3 mg/m3	ACGIH
		TWA	1 mg/m3	NIOSH REL
		ST	3 mg/m3	NIOSH REL
		TWA	1 mg/m3	OSHA Z-1
		TWA	1 mg/m3	OSHA P0
		STEL	3 mg/m3	OSHA P0
		PEL	1 mg/m3	CAL PEL
		STEL	3 mg/m3	CAL PEL

**Engineering measures** : effective ventilation in all processing areas

**Personal protective equipment**

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

## Hand protection

Material

: Protective gloves

Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

## Eye protection

: Ensure that eyewash stations and safety showers are close to the workstation location.

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing problems.

## Skin and body protection

: Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

## Hygiene measures

: When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

: liquid

Colour

: colourless, clear

Odour

: mild

Odour Threshold

: No data available

pH

: 1 - 1.5

Melting point/freezing point

: No data available

Boiling point

: 107.22 °C

Flash point

: Not applicable

Evaporation rate

: 1

Upper explosion limit

: No data available

Lower explosion limit

: No data available

Vapour pressure

: Not applicable

Relative vapour density

: No data available

Density

: 1.259 g/cm<sup>3</sup>

Solubility(ies)

Water solubility

: soluble

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 6.0 mm <sup>2</sup> /s (20 °C)

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use. No decomposition if stored and applied as directed.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Alkali metals Metals
Hazardous decomposition products	: Carbon oxides Phosphorus compounds

**SECTION 11. TOXICOLOGICAL INFORMATION****Potential Health Effects**

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects are immediate and delayed. Symptoms may include blistering, irritation, burns, and pain. Effects are dependent on exposure (dose, concentration, contact time).

**Carcinogenicity:**

<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Acute toxicity**

No data available

**Skin corrosion/irritation****Product:**

Remarks: Extremely corrosive and destructive to tissue.

**Serious eye damage/eye irritation****Product:**

Remarks: May cause irreversible eye damage.

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information****Product:**

Remarks: No data available

---

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

No data available

**Persistence and degradability**

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

No data available

**Bioaccumulative potential****Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

---

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

---

**SECTION 14. TRANSPORT INFORMATION**

Transportation Regulation: 49 CFR (USA): UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID), 8, III
--

Transportation Regulation: IMDG (Vessel): UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID), 8, III
---

Transportation Regulation: IATA (Cargo Air): UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID), 8, III
--

Transportation Regulation: IATA (Passenger Air): This material is not classified.
--



**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

Transportation Regulation: TDG (Canada):  
UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (PHOSPHORIC ACID), 8, III

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
orthophosphoric acid	7664-38-2	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**California Prop 65** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

**TSCA** On TSCA Inventory  
**DSL** All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

**Inventory Acronym and Validity Area Legend:**

TSCA (USA), DSL (Canada), NDSL (Canada)

**SECTION 16. OTHER INFORMATION**

## SAFETY DATA SHEET



## ZEP FS LIME REMOVER 55GL

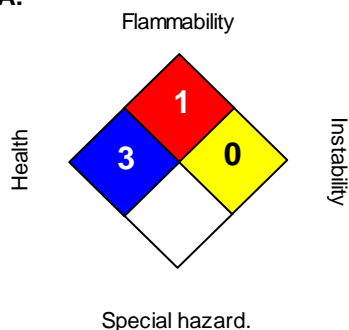
Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017

## Further information

## NFPA:



## HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

## OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Causes severe skin burns and eye damage.

Precautionary statements

**Prevention:** Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

**Disposal:** Dispose of contents/container in accordance with local regulation.

Version:	2.0
Revision Date:	08/17/2017
Print Date:	10/30/2017

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

**ZEP FS LIME REMOVER 55GL**

Version 2.0

Revision Date 08/17/2017

Print Date 10/30/2017