

Safety Data Sheet

acc. to OSHA HCS & WHMIS

Printing date 11/23/2016

Reviewed on 11/23/2016

1 Identification

- **Product identifier:** SLR, SLR-1G, SLR-5G, SLR-DR
- **Trade name:** HVAC CHEMSM SCALE REMOVER - CONCENTRATE
- **Item number(s):** SLR, SLR-1G, SLR-5G, SLR-DR
- **MSDS Number:** 112
- **UPC bar code(s):** 699913-10460, 699913-10465, 699913-10470
- **Application of the substance / the mixture** SCALE REMOVER
- **Manufacturer/Supplier:**
USA ADDRESS:

KEMPER SYSTEM AMERICA, INC.
1200 NORTH AMERICA DR,
WEST SENECA, NY 14224
PH (716) 558-2971



CANADIAN ADDRESS:

KEMPER SYSTEM CANADA
13 -5200 DIXIE ROAD
MISSISSAUGA, ON L4W 1E4
PH (905) 624-5463
FAX (905) 624-2840

- **Information department:**
Tel: (716) 558-2971 ext. 228
www.hvacchem.com
- **Emergency telephone number:**
ChemTrec (800) 424-9300
Canada only: CANUTEC (Call collect) (613) 996-6666

2 Hazard(s) identification

- **Classification of the substance or mixture:**



GHS05 Corrosion

Skin Corrosion - Category 1B H314 Causes severe skin burns and eye damage.
Serious Eye Damage - Category 1 H318 Causes serious eye damage.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Signal word:** Danger

- **Hazard-determining components of labeling:**

phosphoric acid

- **Hazard statements:**

Causes severe skin burns and eye damage.

- **Precautionary statements:**

Do not breathe mist/vapours/spray.

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

Wash thoroughly after handling.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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.

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IF INHALED: Remove person to fresh air and keep comfortable for breathing.

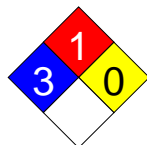
Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Store locked up.

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

• **NFPA ratings (scale 0 - 4):**



Health = 3

Fire = 1

Reactivity = 0

3 Composition/information on ingredients

• **Chemical characterization: Mixtures**

• **Description:** Mixture of the substances listed below with nonhazardous additions.

• **Dangerous components:**

7664-38-2	phosphoric acid	25-30% w/w
112-34-5	2-(2-butoxyethoxy)ethanol	≤10% w/w

• **Additional information:** Exact concentrations are being withheld as trade secrets.

4 First-aid measures

• **After inhalation:**

Remove victim to fresh air and keep at rest in a position comfortable for breathing, immediately call a poison center or doctor.

• **After skin contact:**

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center or doctor.

• **After eye contact:**

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing, immediately call a poison center or doctor.

• **After swallowing:** Rinse mouth, do not induce vomiting, Immediately call a poison center / doctor.

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

No further relevant information available.

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

No further relevant information available.

5 Fire-fighting measures

• **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• **Special hazards arising from the substance or mixture:** No further relevant information available.

• **Protective equipment:** No special measures required.

6 Accidental release measures

• **Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

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- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **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.
- **Specific end use(s):** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

Components with limit values that require monitoring at the workplace:

7664-38-2 phosphoric acid

EL (Canada)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
EV (Canada)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
PEL (USA)	Long-term value: 1 mg/m ³
REL (USA)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
TLV (USA)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³

112-34-5 2-(2-butoxyethoxy)ethanol

TLV (USA)	Long-term value: 67,5* mg/m ³ , 10* ppm *Inhalable fraction and vapor
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- **Additional information:** The lists that were valid during the creation were used as basis.
- **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.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.

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• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

• Material of gloves:

Butyl rubber, BR
 Fluorocarbon rubber (Viton)
 Nitrile rubber, NBR
 Natural rubber, NR

• Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

• Form:	Liquid
• Color:	Red
• Odor:	Odorless
• Odor threshold:	Not determined.
• pH-value at 20 °C:	2
• Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C
• Flash point:	98 °C
• Flammability (solid, gaseous):	Not applicable.
• Ignition temperature:	225 °C
• Decomposition temperature:	Not determined.
• Auto igniting:	Product is not selfigniting.
• Danger of explosion:	Product does not present an explosion hazard.
• Explosion limits	
Lower:	0,9 Vol %
Upper:	5,9 Vol %
• Vapor pressure at 20 °C:	23 hPa
• Density at 20 °C:	1,144 g/cm ³
• Relative density:	Not determined.
• Vapour density:	Not determined.
• Evaporation rate:	Not determined.
• Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
• Partition coefficient (n-octanol/water):	Not determined.

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· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	10,4 %
Solids content:	6,1 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects:**
- **Acute toxicity**
- **Specific symptoms in biological assay:** No further relevant information available.
- **Primary irritant effect**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

111-76-2 | 2-butoxyethanol

3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.

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- **Additional ecological information**
- **General notes:**
 - Must not reach bodies of water or drainage ditch undiluted or unneutralized.
 - Water hazard class 1 (Self-assessment): slightly hazardous for water
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Other adverse effects:** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings**
- **Recommendation:**
 - Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.

14 Transport information

· UN-Number	UN1805
· DOT, TDG, IMDG, IATA	
· UN proper shipping name	Phosphoric acid solution mixture
· DOT	1805 Phosphoric acid solution mixture
· TDG	PHOSPHORIC ACID, SOLUTION mixture
· IMDG, IATA	
· Transport hazard class(es)	
· DOT	
	
· Class	8 Corrosive substances
· Label	8
· TDG, IMDG, IATA	
	
· Class	8 Corrosive substances
· Label	8
· Packing group	
· DOT, TDG, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	No

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<ul style="list-style-type: none"> • Special precautions for user: • Danger code (Kemler): • EMS Number: • Segregation groups • Stowage Category 	Warning: Corrosive substances 80 F-A,S-B Acids A
<ul style="list-style-type: none"> • Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: 	Not applicable.
<ul style="list-style-type: none"> • Transport/Additional information: • DOT • Quantity limitations 	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
<ul style="list-style-type: none"> • TDG • Excepted quantities (EQ) 	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> • IMDG • Limited quantities (LQ) • Excepted quantities (EQ) 	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"> • UN "Model Regulation": 	UN 1805 PHOSPHORIC ACID SOLUTION MIXTURE, 8, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

• **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

• **Section 313 (Specific toxic chemical listings):**

7664-38-2	phosphoric acid
112-34-5	2-(2-butoxyethoxy)ethanol
111-76-2	2-butoxyethanol

• **TSCA (Toxic Substances Control Act):**

All ingredients are listed or exempted

• **Proposition 65**

• **Chemicals known to cause cancer:**

None of the ingredients is listed.

• **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

• **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

• **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

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- **Canadian substance listings**

- **Canadian Domestic Substances List (DSL/NDSL):**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%):**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%):**

7664-38-2	phosphoric acid
112-34-5	2-(2-butoxyethoxy)ethanol

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05

- **Signal word** Danger

- **Hazard-determining components of labeling:**

phosphoric acid

- **Hazard statements**

Causes severe skin burns and eye damage.

- **Precautionary statements**

Do not breathe mist/vapours/spray.

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

Wash thoroughly after handling.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Store locked up.

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

16 Other information

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Kemper System America, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of Kemper System America, Inc. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made. Kemper System America, Inc is an ISO 9001:2008 and ISO 14001:2004 registered company.

- **Department issuing SDS:** Product safety department

- **Contact:** Stephen Nowicki

- **Date of preparation / last revision** 11/23/2016 / -

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· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

CA