

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/18/2014

Reviewed on 03/18/2014

1 Identification

- **Trade name:** HVAC CHEMSM SCALE REMOVER - CONCENTRATE
- **Article number:** SLR, SLR-1G, SLR-5G, SLR-DR
- **MSDS Number:** 00257-CA-EN
- **UPC bar code(s):** 699913-10460, 699913-10465, 699913-10470
- **Relevant identified uses of the substance:** 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 Corr. 1B H314 Causes severe skin burns and 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:**

Keep out of reach of children.

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

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Do not breathe mist/vapours/spray.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/18/2014

Reviewed on 03/18/2014

Trade name: HVAC CHEMSM SCALE REMOVER - CONCENTRATE

(Contd. of page 1)

Wash contaminated clothing before reuse.
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 Immediately call a POISON CENTER/doctor.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

• **WHMIS-symbols:**

D2B - Toxic material causing other toxic effects
 E - Corrosive material



• **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%
112-34-5	2-(2-butoxyethoxy)ethanol	≤10%

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

4 First-aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** 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 swallowed, do not induce vomiting. Get medical attention right away.
- **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.

CA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/18/2014

Reviewed on 03/18/2014

Trade name: HVAC CHEMSM SCALE REMOVER - CONCENTRATE

(Contd. of page 2)

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Keep unprotected persons away.
- **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 ()	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
EV ()	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³

- **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:** Not required.
- **Protection of hands:**



Protective gloves

(Contd. on page 4)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/18/2014

Reviewed on 03/18/2014

Trade name: HVAC CHEMSM SCALE REMOVER - CONCENTRATE

(Contd. of page 3)

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

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· Form:	Liquid
· Color:	Red
· Odor:	Odorless
· Odour 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.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.

(Contd. on page 5)

-CA-

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/18/2014

Reviewed on 03/18/2014

Trade name: HVAC CHEMSM SCALE REMOVER - CONCENTRATE

(Contd. of page 4)

- | |
|---|
| <ul style="list-style-type: none"> · Solvent content: <li style="padding-left: 20px;">Organic solvents: 10.4 % |
| <ul style="list-style-type: none"> · 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
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- **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.
- **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

(Contd. on page 6)

Safety Data Sheet

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Printing date 03/18/2014

Reviewed on 03/18/2014

Trade name: HVAC CHEMSM SCALE REMOVER - CONCENTRATE

(Contd. of page 5)



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

<ul style="list-style-type: none"> · UN-Number · DOT, TDG, IMDG, IATA 	UN1805
<ul style="list-style-type: none"> · UN proper shipping name · DOT · TDG · IMDG, IATA 	Phosphoric acid solution, mixture 1805 Phosphoric acid solution, mixture PHOSPHORIC ACID, SOLUTION, mixture
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT 	<div style="text-align: center;">  <p>CORROSIVE 8</p> </div>
<ul style="list-style-type: none"> · Class · Label · TDG, IMDG, IATA 	8 Corrosive substances. 8
<ul style="list-style-type: none"> · Class · Label 	<div style="text-align: center;">  <p>8</p> </div> 8 Corrosive substances 8
<ul style="list-style-type: none"> · Packing group · DOT, TDG, IMDG, IATA 	III
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: 	No
<ul style="list-style-type: none"> · Special precautions for user: · Danger code (Kemler): · EMS Number: 	Warning: Corrosive substances 80 F-A,S-B

(Contd. on page 7)

-CA-

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(Contd. of page 6)

- | | |
|---|---|
| · Segregation groups | Acids |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: | Not applicable. |
| · UN "Model Regulation": | UN1805, 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

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· 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.

· Carcinogenic categories
· EPA (Environmental Protection Agency):

111-76-2 | 2-butoxyethanol

NL

· TLV (Threshold Limit Value established by ACGIH):

111-76-2 | 2-butoxyethanol

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients is listed.

· Canadian substance listings
· Canadian Domestic Substances List (DSL):

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

(Contd. on page 8)

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Trade name: HVAC CHEMSM SCALE REMOVER - CONCENTRATE

(Contd. of page 7)

- **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**

Keep out of reach of children.

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

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Do not breathe mist/vapours/spray.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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.

Immediately call a POISON CENTER/doctor.

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 registered company.

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

- **Contact:** Stephen Nowicki

- **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

WHMIS: Workplace Hazardous Materials Information System (Canada)