

SUPERKLEEN DELIMER LIME SCALE REMOVER

UNI-KEM CHEMICALS, INC.

802 Wm. Leigh Drive
Tullytown, PA 19007
Phone—800-752-1120
Fax—215-269-1800

GENERAL DESCRIPTION: SUPERKLEEN DELIMER is a fast, versatile, effective cleaner for food service operations, SKLSR is a unique combination of synthetic detergent and inorganic acid. It rapidly penetrates and removes mineral deposits and hard water films. It cleans and brightens metals quickly and easily, saving time, work, and manpower. Yet, when used as recommended, does not chemically harm copper, iron, stainless steel, or glass.

SK LSR is formulated for multiple cleaning operations. It can be used for manually cleaning such kitchen equipment as stainless steel table tops, counters, and food preparation equipment. It is recommended for removing hard water scale deposits and is satisfactory for use on stainless steel and cast iron surfaces found in dishwashing machine tanks.

SK LSR eliminates hard water problems. It does not cloud up in hard water and leaves no film, residues, or deposits. Also, SK LSR solutions give off no fumes or odors and are not affected by temperature.

PHYSICAL PROPERTIES:

Chemical composition Soil suspending agents, anti redeposition agents, standard acid compound, water treatment agents.

pH 1

pH of 1% solution 2.1

Specific Gravity 1.13 (9.6 pounds per gallon)

Solubility Complete and fast

Rinsing Complete

Viscosity Like water

Foam Moderate

Wetting Ability Good

Phosphoric Acid 20%

Stability 1 Year @ Ambient Temperature

INSTRUCTIONS FOR USE:

Brush Cleaning: Use 1 fl. oz. of SKLSR per gallon of water (8ml/L). Brush until clean and then rinse thoroughly with potable water.

Soak Cleaning: (Stainless steel utensils and other small items.) Use 1 fl. oz. of SKLSR per gallon of water. Soak for ten minutes. Brush if necessary. Rinse thoroughly with potable water.

Hard Water Film Remover: Apply SKLSR at 2-4 fl. oz. per gallon of water. Brush until clean. After 10 minutes, or when surface is clean, flush with potable water.

Descaling of Commercial Dish Machines:

(1) Add SKLSR to wash, power rinse, and scrapper tanks at 2-8 fl. ozs. per gallon (16-64 ml/L) of water, depending on amount of scale to be removed.

(2) Circulate solution for 10 - 30 minutes at normal machine operating temperatures. Descaling process is enhanced as solution temperatures are increased.

HANDLING PRECAUTIONS:

CAUTION - WARNING

KEEP OUT OF REACH OF CHILDREN.

Acidic liquid. Contact with skin and eyes may cause severe irritation. Harmful if swallowed. Flood with water if splashed in eyes. Flush with water for 15 minutes and consult a physician immediately. If ingested, drink large amounts of milk, milk of magnesia or gelatin, or if these are not available, drink large amounts of water. Do not induce vomiting. Obtain prompt medical attention.

PACKAGING:

4 /1 gal plastic bottles - 38 lbs net/41 lbs gross

Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.

CODE: SKLSR

SAFETY DATA SHEET

Issuing Date 18-Apr-2013

Revision Date 18-Apr-2013

Revision Number 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name SK LIME SCALE REMOVER

Other means of identification

Product Code(s) SKLSR

UN-Number UN1760

Synonyms SKLSR4

Recommended use of the chemical and restrictions on use

Recommended Use Institutional dish machine detergent

Uses advised against No information available

Supplier's details

Supplier Address

Uni-Kem Chemicals, Inc.
P.O. Box # 1625
802 Wm. Leigh Drive
Tullytown, PA 19007
215-269-1800

Emergency telephone number

Emergency Telephone Number CHEM-TEL, INC.
24 Hour Emergency Contact 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Acute Inhalation Toxicity - Vapors	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/Irritation	Category 1 Subcategory 1A
Serious Eye Damage/Eye Irritation	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Danger
Hazard Statements
• Harmful if inhaled
• Causes severe skin burns and eye damage

**Appearance** Clear**Physical State** Liquid.**Odor** No information available**Precautionary Statements****Prevention**

- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

General Advice

- Immediately call a POISON CENTER or doctor/physician

Eyes

- 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 or doctor/physician.

Skin

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell

Ingestion

- IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

- Store locked up

Disposal

- Dispose of contents/container to an approved waste disposal plant

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

LSRS

Chemical Name	CAS-No	Weight %	Trade secret
Hydrogen chloride	7647-01-0	10-30	*
Phosphoric acid	7664-38-2	10-30	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Immediate medical attention is required.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion	Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

No information available

Explosion Data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Stop leak if you can do it without risk. If spilled, take caution, as material can cause surfaces to become very slippery.

Environmental Precautions

Environmental Precautions Dispose of contents/container to an approved waste disposal plant.

Methods and materials for containment and cleaning up

Methods for Containment Stop leak if you can do it without risk

Methods for Cleaning Up Contain spill, dilute with water and neutralize as required. Wash away small spills with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Do not take internally. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature. Keep from freezing. Keep container closed when not in use. Keep out of the reach of children.

Incompatible Products

Acids. Chlorine-based bleaching agents. Oxidizing agents. Metals. Alkalis. Do not mix with anything but water

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen chloride 7647-01-0	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m ³ Ceiling: 5 ppm Ceiling: 7 mg/m ³	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³
Phosphoric acid 7664-38-2	STEL: 3 mg/m ³ TWA: 1 mg/m ³	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ (vacated) STEL: 3 mg/m ³	IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Tightly fitting safety goggles.

Skin and Body Protection

Rubber boots. Apron. Rubber gloves. Latex gloves

Respiratory Protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State
Odor

Liquid
No information available

Appearance
Odor Threshold

Clear
No information available

Property

Values

Remarks/ - Method

pH

1.8

(4 % solution)

Melting Point/Range

No data available

None known

Boiling Point/Boiling Range

> 100 °C / > 212 °F

None known

Flash Point

No data available

None known

Evaporation rate

No data available

None known

Flammability (solid, gas)

No data available

None known

Flammability Limits in Air

upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Relative Density	No data available	None known
Specific Gravity	1.09	None known
Water Solubility	100%	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	5 cps	None known

Flammable Properties Not flammable

Explosive Properties No data available

Oxidizing Properties No data available

Other information

VOC Content (%) No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Spills or careless handling. Incompatible products.

Incompatible materials

Acids. Chlorine-based bleaching agents. Oxidizing agents. Metals. Alkalis. Do not mix with anything but water

Hazardous decomposition products

None, but may liberate Hydrogen Gas in the presence of metals.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	Harmful by inhalation. May cause irritation of respiratory tract.
Eye Contact	Causes serious eye damage.
Skin Contact	Causes severe skin burns.
Ingestion	May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrogen chloride	= 700 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 3124 ppm (Rat) 1 h
Phosphoric acid	= 1530 mg/kg (Rat)	2730 mg/kg (Rabbit)	850 mg/m ³ (Rat) 1 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen chloride		Group 3		

IARC: (International Agency for Research on Cancer)

Group 3: Not Classifiable as to its Carcinogenicity to Humans

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organ Effects Eyes. Skin. Respiratory system.

Aspiration Hazard No information available.

Numerical measures of toxicity - Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 2853 mg/kg; Acute toxicity estimate

LD50 Dermal 17602 mg/kg; Acute toxicity estimate

Inhalation

dust/mist 2.9 mg/L; Acute toxicity estimate

Vapor 17 mg/L; Acute toxicity estimate

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Hydrogen chloride		LC50 96 h: = 282 mg/L static (Gambusia affinis)		
Phosphoric acid		LC50: 3 - 3.5 mg/L Gambusia affinis 96 h		EC50 12 h: = 4.6 mg/L (Daphnia magna)

Persistence and Degradability No information available.

Bioaccumulation No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging Do not re-use empty containers.

Chemical Name	California Hazardous Waste
Phosphoric acid	Corrosive

14. TRANSPORT INFORMATION

DOT

UN-Number	UN1760
Proper shipping name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II
Reportable Quantity (RQ)	Phosphoric acid: RQ kg= 14635.72, Hydrogen chloride: RQ kg= 13016.05
Description	UN1760, Corrosive liquid, n.o.s. (Hydrogen chloride, Phosphoric acid), 8, II, RQ
Emergency Response Guide Number	154

TDG

UN-Number	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II
Description	UN1760, Corrosive liquid, n.o.s. (Hydrogen chloride, Phosphoric acid), 8, II

UN-Number	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II
Description	UN1760, Corrosive liquid, n.o.s. (Hydrogen chloride, Phosphoric acid), 8, II

ICAO

UN-Number	UN1760
Proper shipping name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II
Description	UN1760, Corrosive liquid, n.o.s., 8, II

IATA

UN-Number	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II
ERG Code	8L
Description	UN1760, Corrosive liquid, n.o.s. (Hydrogen chloride, Phosphoric acid), 8, II

IMDG/IMO

UN-Number	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II
EmS No.	F-A, S-B
Description	UN1760, Corrosive liquid, n.o.s. (Hydrogen chloride, Phosphoric acid), 8, II

RID

UN-Number	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II
Classification Code	C9
Description	UN1760, Corrosive liquid, n.o.s. (Hydrogen chloride, Phosphoric acid), 8, II

ADR

UN-Number	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II

Classification Code	C9
Tunnel Restriction Code	(E)
Description	UN1760, Corrosive liquid, n.o.s. (Hydrogen chloride, Phosphoric acid), 8, II, (E)
ADR/RID-Labels	8

ADN

Proper Shipping Name	Corrosive liquid, n.o.s.
Hazard Class	8
Packing Group	II
Classification Code	C9
Special Provisions	274
Description	UN1760, Corrosive liquid, n.o.s. (Hydrogen chloride, Phosphoric acid), 8, II
Limited Quantity	1 L

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
NDSL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Hydrogen chloride	7647-01-0	17.44	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrogen chloride	5000 lb			X
Phosphoric acid	5000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Hydrogen chloride	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ
Phosphoric acid	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Hydrogen chloride	X	X	X	X	X
Phosphoric acid	X	X	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 3	Flammability 0	Instability 1	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 3	Flammability 0	Physical Hazard 1	Personal Protection X

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General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

