UNI-KEM CHEMICALS, INC.

UNI-KLEEN SOLID CONTROL

802 Wm. Leigh Drive Tullytown, PA 19007 Phone—800-752-1120 Fax—215-269-9855

GENERAL DESCRIPTION: UNI-KLEEN SOLID SF is an encapsulated machine warewashing compound that is soft metal safe and designed to handle moderate soil loads in soft to medium-hard water at normal warewashing concentrations. UNI-KLEEN SOLID SF is not only packed with strong cleaning and destaining agents, but also the glaze and metal protectants necessary to assure a safe and effective wash.

UNI-KLEEN SOLID SF will deliver sparkling ware with one pass through the dishmachine when used in conjunction with UNI-DRY or UNI-DRY PLUS.

UNI-KLEEN SOLID SF solutions are safe to use on china, plastics, glassware, aluminum, pewter, and silver. They will not attack machine parts thereby reducing parts replacement and chance of breakdown. In addition, UNI-KLEEN SOLID SF conditions hard water and prevents formation of scale on machines.

PHYSICAL PROPERTIES:

| Chemical Composition: Destaining agents, alkaline |
|---|
| builders, surfactants, glaze and |
| metal protectants, anti-caking and |
| water softening agents. |
| Appearance:Orange solid |
| Caustic: |
| Metal Safety: Recommended for use on aluminum and |
| other soft metal ware at normal use concentrations. |
| Foaming: Low |
| Rinsing: Excellent |
| Water Hardness Tolerance. |

10 Grains Per Gallon at 0.3% 7 Grains Per Gallon at 0.2%

3 Grains Per Gallon at 0.1%

RECOMMENDED RANGE OF USE CONCENTRA-TIONS:

Titrate with Institutional Test Kit. Use range is 0.15% to 0.3%, or 6 to 12 drops (each drop = .025%) using a 10 ml sample and 3 drops of Brom Phenol Blue Indicator Solution. Select actual use concentration to handle water hardness and soil load.

NOTE: To properly titrate, adjust for raw water alkalinity by titrating H2O just as you would a detergent solution. Subtract that number from total drop titration to derive intended detergent concentration.

Example: Raw water titrates 1 drop, total drop titration equals 11 drops. $(11 - 1 = 10 \times .025\% = 0.25\%)$

HANDLING PRECAUTIONS:

CAUTION: WARNING KEEP OUT OF REACH OF CHILDREN.

Alkaline solid. 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 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:

4/8 lb. capsules/case - 32 lbs net / 34 lbs gross

CODE: UKSF

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.

| * | | |
|---|--|--|
| | | |

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

UNI-KLEEN SOLID CONTROL

Other means of identification

Product Code(s)

UKSC4

UN-Number

UN1759

Synonyms

UKSC4

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. 802 Wm. Leigh Drive Tullytown, PA 19007 1-800-752-1120

Emergency telephone number

Emergency Telephone

CHEM-TEL, INC.

Number

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)

| 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

· Causes severe skin burns and eye damage

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Appearance Tan

Physical State Solid.

Odor No information available

Precautionary Statements

Prevention

- · 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.

Skir

- 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

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

Harmful to aquatic life with long lasting effects

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

UKSC4

| Chemical Name | CAS-No | Weight % | Trade secret |
|------------------|-----------|----------|--------------|
| Sodium hydroxide | 1310-73-2 | 47-48 | * |
| Sodium carbonate | 497-19-8 | < 5 | * |

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

| RST | | | |
|-----|--|--|--|
| | | | |
| | | | |
| | | | |

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 Sensitivity to Static Discharge None.

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.

Environmental Precautions

Environmental Precautions Avoid release to the environment. Dispose of contents/container to an approved waste

disposal plant. See Section 12 for additional Ecological Information

Methods and materials for containment and cleaning up

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

water and neutralize as required. Wash away small spills with plenty of water.

7. HANDLING AND STORAGE

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Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Wear personal

protective equipment. Avoid contact with skin, eyes and clothing. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory 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

Keep containers tightly closed in a dry, cool and well-ventilated place. Storage

Incompatible Products Acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------|------------------------------|--|------------------------------|
| Sodium hydroxide | Ceiling: 2 mg/m ³ | TWA: 2 mg/m ³ | IDLH: 10 mg/m ³ |
| 1310-73-2 | | (vacated) Ceiling: 2 mg/m ³ | Ceiling: 2 mg/m ³ |

Appropriate engineering controls

Engineering Measures

Showers

Evewash 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.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures**

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Solid **Appearance** Tan

Odor No information available Odor Threshold No information available

Property Values Remarks/ - Method None known Hq No data available Melting Point/Range No data available None known **Boiling Point/Boiling Range** No data available 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 None known No data available Vapor Density No data available None known **Relative Density** No data available None known Specific Gravity No data available. None known 100% Water Solubility None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/waterNo data available None known

Autoignition Temperature Decomposition Temperature

Viscosity

No data available No data available No data available

None known None known None known

Flammable Properties

Not flammable

Explosive PropertiesOxidizing Properties

No data available 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

Excessive heat.

Incompatible materials

Acids. Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

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 |
|------------------|----------------------|---------------------|--|
| Sodium hydroxide | 4 0 | 1350 mg/kg (Rabbit) | - |
| Sodium carbonate | = 4090 mg/kg (Rat) | 2-2 | ###################################### |

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

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Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity Contains no ingredient listed as a carcinogen.

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 14326 mg/kg; Acute toxicity estimate LD50 Dermal 2842 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|--------------------------|---------------------------------------|---|-------------------------------|--|
| Sodium hydroxide | | LC50 96 h: = 45.4 mg/L static (Oncorhynchus mykiss) | | |
| Pentasodium triphosphate | | LC50 48 h: = 1650 mg/L (Leuciscus idus) | | |
| Sodium carbonate | EC50 120 h: = 242 mg/L (Nitzschia) | LC50 96 h: 310 - 1220 mg/L static (Pimephales promelas) LC50 96 h: = 300 mg/L static (Lepomis macrochirus) | | EC50 48 h: = 265 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 |
|------------------|----------------------------|
| Sodium hydroxide | Toxic |
| | Corrosive |
| Sodium carbonate | Corrosive |

14. TRANSPORT INFORMATION

DOT

UN-Number UN1759

Proper shipping name Corrosive solids, n.o.s.

Hazard Class 8 **Packing Group** 11

Reportable Quantity (RQ) Sodium hydroxide: RQ kg= 955.79, Pentasodium triphosphate: RQ kg= 11713.11

Description UN1759, Corrosive solids, n.o.s. (Sodium hydroxide), 8, II, RQ

Emergency Response Guide

Number

154

TDG

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group ||

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group ||

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

ICAO

UN-Number UN1759

Proper shipping name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group ||

Description UN1759, Corrosive solid, n.o.s., 8, II

IATA

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group || ERG Code 8|

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

IMDG/IMO

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group ||

EmS No. F-A, S-B

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

RID

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group || Classification Code C10

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

ADR

UN-Number UN1759

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group II
Classification Code C10
Tunnel Restriction Code (E)

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II, (E)

ADR/RID-Labels

ADN

Proper Shipping Name Corrosive solid, n.o.s.

Hazard Class 8
Packing Group II
Classification Code C10

Special Provisions 274

Description UN1759, Corrosive solid, n.o.s. (Sodium hydroxide), 8, II

Limited Quantity 1 kg

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL 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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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 |
|------------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| Sodium hydroxide | 1000 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 |
|------------------|--------------------------|------------------------------------|---|
| Sodium hydroxide | 1000 lb | | RQ 1000 lb final RQ RQ 454 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 |
|--------------------------|------------|---------------|--------------|----------|--------------|
| Sodium hydroxide | X | Х | Х | | X |
| Pentasodium triphosphate | | X | Х | | |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| 16. OTHER INFORMATION | | | | | | | |
|-----------------------|-----------------|----------------|-------------------|------------------------------------|--|--|--|
| NFPA | 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 | | | |

Prepared By

Product Stewardship

23 British American Blvd. Latham, NY 12110

1-800-572-6501

Issuing Date Revision Date Revision Note 18-Apr-2013 18-Apr-2013

Initial Release.

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