UNI-KEM CHEMICALS, INC.

UNI-KLEEN SOLID SF

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 CONCENTRATIONS:

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 07-Aug-2013

Revision Date 07-Aug-2013

Revision Number 0

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

GHS product identifier

Product Name UNI-KLEEN SOLID SAFE

Other means of identification

Product Code(s) UKSF4

UN-Number

Synonyms JASOLSF

Recommended use of the chemical and restrictions on use

Recommended Use Institutional detergent

Uses advised against No information available

Supplier's details

Supplier Address Uni-Kem Chemicals, Inc. 802 Wm. Leigh Dr. Tullytown, PA 19007

TEL: 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



Appearance YELLOW SOLID

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
- · Specific treatment (see supplemental instructions on the administration of antidotes on this label)

Fves

- 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

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

JASOLSFF

Chemical Name	CAS-No	Weight %	Trade secret
Sodium hydroxide	1310-73-2	1-5	*

^{*}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 Sensitivity to Static Discharge None.

None

Protective Equipment and Precautions for Firefighters

Protect from irritating mists and corrosive solutions with pressure demand, self-contained respirator and protective clothing.

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. 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

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. Soft metals. Aluminium. Do not mix with anything but water

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Water Solubility

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

Appropriate engineering controls

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Chemical splash goggles.
Skin and Body Protection 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.

None known

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 Solid Appearance Yellow solid

Odor No information available Odor Threshold No information available

Property Values Remarks/ - Method pΗ NA None known Melting Point/Range No data available None known Boiling Point/Boiling Range NA 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 NA None known

100%

Solubility in other solventsNo data availableNone knownPartition coefficient: n-octanol/waterNo data availableNone knownAutoignition TemperatureNo data availableNone knownDecomposition TemperatureNo data availableNone knownViscosityNANone 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. Soft metals. Aluminium. Do not mix with anything but water

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 Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodiumium hydroxide = 214 mg/kg (Rat)			-

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 Contains no ingredient listed as a carcinogen.

Reproductive Toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration Hazard
No information available.
No information available.
No information available.

Numerical measures of toxicity - Product

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

LD50 Oral 2504 mg/kg; 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)
Sodium hydroxide		LC50 96 h: = 80 mg/L static		
1310-73-2		(Gambusia affinis)		

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Log Pow
Sodium hydroxide	0.83

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

14. TRANSPORT INFORMATION

DOT

Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies
EINECS Complies
IECSC Complies
PICCS Complies
AICS Complies

Legend

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

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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
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 contains the following 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	X	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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

Issuing Date07-Aug-2013Revision Date07-Aug-2013Revision NoteInitial 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