

UNI-KLEEN SOLID

Heavy Duty Detergent

UNI-KEM CHEMICALS, INC.

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

GENERAL DESCRIPTION: UNI-KLEEN is a HIGH CAUSTIC SOLID, heavy duty machine warewashing compound. UNI-KLEEN provides clean ware and sparkling glasses under heavy soil load conditions in hard water, when used at normal warewashing concentrations. UNI-KLEEN is the most powerful solid dishwashing detergent available anywhere, and gives you the ease of dispensing previously associated only with liquids. UNI-KLEEN will deliver sparkling ware with one pass through the dishmachine when used in conjunction with UNI-DRY, UNI-DRY PLUS or UNI-DRY H.D. UNI-KLEEN can be used in any dishmachine for washing all types of china, tableware, and glassware. UNI-KLEEN contains a unique built-in system to aid in the reduction or elimination of iron deposits and limescale build-up.

PHYSICAL PROPERTIES:

Chemical Composition:Caustic base, water and soil
Conditioners, alkalinity builders and buffers.

Appearance: Solid Brown Block

pH of .075% solution: 12.2

Solubility: Controlled and Complete

Foaming: None

Wetting: Excellent

Water Hardness Tolerance .

13 Grains Per Gallon at 0.2%

7 Grains Per Gallon at 0.1%

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.



RECOMMENDED RANGE OF USE CONCENTRATIONS:

Titrate with Institutional Test Kit. Use range is 0.1% to 0.25%, or 6 to 16 drops (each drop = .025%) using a 10 ml sample and 3 drops of Phenolphthalein Indicator. Test alkalinity of incoming water and adjust titrations accordingly.

Use only in a SOLID BOWL TYPE DETERGENT DISPENSER. Do not use in conventional water filled dispensers.

Remove detergent container cover, invert container and insert container in dispenser or use screw threads to attach dispenser.

To remove used container, carefully lift or unscrew container from dispenser.

Turn container upright to avoid spills. Use cover from new container to seal the used container. **If product contacts hands, wash off immediately.**

HANDLING PRECAUTIONS:

WARNING: CONTAINS CAUSTIC SODA

CAUTION: WARNING

KEEP OUT OF REACH OF CHILDREN.

Highly alkaline solid. Contact with skin and eyes may cause severe burns. 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

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

Other means of identification

Product Code(s) UKSO

UN-Number UN1759

Synonyms UKSO

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
TEL: 800-752-1120

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)

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** 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.

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

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**

UKSO

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.

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.

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

Methods for Cleaning Up If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. 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. 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**Storage**

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

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 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³	IDLH: 10 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**

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.

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

Tan

Odor

No information available

Odor Threshold

No information available

Property**Values****Remarks/ - Method**

pH

No data available

None known

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

No data available

None known

Vapor Density

No data available

None known

Relative Density

No data available

None known

Specific Gravity

No data available.

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	No data available	None known
Flammable Properties	Not flammable	
Explosive Properties	No data available	
Oxidizing Properties	No data available	

Other information

VOC Content (%)	No data available
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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	-	1350 mg/kg (Rabbit)	-
Sodium carbonate	= 4090 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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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	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	II
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 II
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 II
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 II
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 II
ERG Code 8L
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 II
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 II
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 8

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/NDL - 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	X	X		X
Pentasodium triphosphate		X	X		

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 -
HMIS	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
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Revision Note	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

