

CYCLE 10

UNI-KEM CHEMICALS, INC.

802 WM. LEIGH DR.
TULLYTOWN, PA 19007
Phone—800-752-1120
Fax—215-269-9855

GENERAL DESCRIPTION: **CYCLE 10** is a concentrated, highly alkaline laundry detergent containing a specific blend of soil emulsifying agents. **CYCLE 10** is formulated with advanced optical brighteners which provide superior results on all washable fabrics and is safe for synthetic and natural fibers. **CYCLE 10** removes stubborn soil and keeps it in suspension, preventing redeposition on fabric. **CYCLE 10** rinses quickly and completely, and is effective in all water hardness conditions and temperatures. **CYCLE 10** is biodegradable.

PHYSICAL PROPERTIES:

Chemical Composition	Soil suspending & rinsing agents; mineral sequestering agents for hard water conditioning; neutrally charged surfactants for effective hard water washing.
Appearance.....	Clear amber liquid
Ph.....	13.8
pH of 1% solution	12.4
Specific gravity	1.36 (11.32 lbs/gal)
Penetration.....	Immediate
Stability	3 months @ Ambient Temperature
Wetting Ability.....	Excellent
Biodegradable.....	Yes
Foam.....	Moderate
Rinsing	Complete
Odor.....	Pleasant

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.



DIRECTIONS FOR USE:

CYCLE 10 Liquid Laundry Detergent is specially formulated to be used with automated injector systems. **CYCLE 10** can be dispensed directly from the shipping container, thereby eliminating hand feeding from powder hoppers and possible spillage. For normal soils, use 8 to 12 ounces per hundred pounds of work. **CYCLE 10** is completely soluble in all normal water temperatures. For optimum soil release, use in hot (140oF to 160oF) water for removing normal soils. Effective soil removal, at the concentrations and temperatures given, may be obtained during a normal 6 to 10 minute wash cycle. If extreme soil conditions exist, a longer or repeat cycle may be necessary.

HANDLING PRECAUTIONS:

CAUTION: WARNING

KEEP OUT OF REACH OF CHILDREN.

Alkaline 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 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:

5 gal plastic pail - 57 lbs net / 59 lbs gross
15 gal plastic drum - 170 lbs net / 177lbs gross

CODE: C10CY

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 CYCLE 10

Other means of identification

Product Code(s) CYCLE 10

UN-Number UN1760

Synonyms CYCLE 10

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
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** Clear**Physical State** Liquid.**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**

Cycle 10

Chemical Name	CAS-No	Weight %	Trade secret
Potassium hydroxide	1310-58-3	5-10	*

*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. Large spillage: Soak up with inert absorbent material.

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.

Incompatible Products

Strong oxidizing agents. Aluminium. Soft metals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	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 resistant goggles must be worn. Face-shield.

Skin and Body Protection

Rubber boots. Apron. Rubber gloves. Neoprene 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	Liquid	Appearance	Liquid
Odor	No information available	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	12.8	(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	1.22	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

Strong oxidizing agents. Aluminium. Soft metals.

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
Potassium 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	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
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	25000 mg/kg; Acute toxicity estimate
LD50 Dermal	3034 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)
Potassium hydroxide		LC50 96 h: = 80 mg/L static (Gambusia affinis)		

Persistence and Degradability No information available.

Bioaccumulation No information available.

Chemical Name	Log Pow
Potassium 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
Potassium hydroxide	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT

UN-Number	UN1760
Proper shipping name	Corrosive liquids, n.o.s.
Hazard Class	8
Packing Group	II
Reportable Quantity (RQ)	Potassium hydroxide: RQ kg= 22700.00
Description	UN1760, Corrosive liquids, n.o.s. (Potassium hydroxide), 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. (Potassium hydroxide), 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. (Potassium hydroxide), 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. (Potassium hydroxide), 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. (Potassium hydroxide), 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. (Potassium hydroxide), 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. (Potassium hydroxide), 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. (Potassium hydroxide), 8, II
Limited Quantity	1 L

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
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DSL	Complies
NDSL	Complies
KECL	Complies
PICCS	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and 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	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
Potassium 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
Potassium 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
Potassium 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 1	Physical and Chemical Hazards -
HMIS	Health Hazard 3	Flammability 0	Physical Hazard 1	Personal Protection X

Issuing Date 18-Apr-2013
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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

