

Cycle 2

Liquid Laundry Detergent

UNI-KEM CHEMICALS, INC

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

GENERAL DESCRIPTION: **CYCLE 2** is a laundry detergent concentrate for use in hot or cold water. **CYCLE 2** is the result of the latest technology in surfactants and emulsifiers: raw materials that are designed to work equally well in hot or cold water. **CYCLE 2** is a specialized blend of soil suspending agents, emulsifiers, anti-redeposition agents, water conditioners, and optical brighteners, **CYCLE 2** will deliver clean linen when used in combination with laundry bleach and laundry Break.

Because of **CYCLE 2**'s excellent rinsing and water conditioning properties, linen that was once dingy gray or yellow becomes white again. **CYCLE 2** will not only deliver clean, white linen but will actually reverse the graying or yellowing problem encountered in a troubled laundry.

With **CYCLE 2**, even wool and silk may be laundered without causing damage. Badly stained linen previously taken out of circulation can be put back into service by using **CYCLE 2** as a presoak.

PHYSICAL PROPERTIES:

Chemical Composition	Soil suspending and Rinsing agents; emulsifiers; anti-redeposition agents; Mineral sequestering agents for hard water conditioning; Neutrally charged surfactants for effective hard water washing
Appearance	Light Amber Liquid
pH	7.8
Specific Gravity	1.03 (8.0 lbs/gal)
Penetration	Immediate
Stability	1 year @ ambient temperature
Wetting Ability	Excellent
Foam	Moderate
Rinsing	Complete
Biodegradable	Yes

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 2 is specially formulated to be used with automated injector systems. **CYCLE 2** can be dispensed directly from the shipping container, thereby eliminating hand feeding from powder hoppers and possible spillage. For normal soils, use five (5) to eight (8) ounces per hundred pounds of work. **CYCLE 2** is completely soluble at all normal water temperatures. Optimum soil release will result at any temperature from 30°F to 170°F. Effective soil re-

moval at the concentrations and temperatures given may be obtained during a normal 6 to 10 minute wash cycle. If extreme conditions exist, a longer, or repeat cycle may be necessary.

AS A PRESOAK:

CYCLE 2 may be used as an effective presoak when diluted 1 to 2 ounces for every 5 gallons of water. For heavily soiled linen, an overnight presoak is recommended.

HANDLING PRECAUTIONS:

CAUTION: FIRST AID KEEP OUT OF REACH OF CHILDREN.

This product designed for commercial use only. Not intended for home use.

EYES: Flush with water for at least 15 minutes. If irritation persists, obtain medical attention. **SKIN:** Wash with plenty of water for 15 minutes. If irritation occurs and persists, obtain medical attention. **INGESTION:** Drink water to dilute. Do not induce vomiting. Obtain medical attention. **DECONTAMINATION PROCEDURE:** Wash with soap and water.

PACKAGING:

2.5 gal plastic pail - 24 lbs net/48 lbs gross
5 gal plastic pail - 43 lbs net/46 lbs gross
15 gal plastic drum - 129 lbs net/135 lbs gross

Code: C2CY

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 CYCLE 2

Other means of identification

Product Code(s) C2CY

Synonyms C2CY

Recommended use of the chemical and restrictions on use

Recommended Use Institutional laundry 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 not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word None

The product contains no substances which at their given concentration are considered to be hazardous to health

Appearance Clear Physical State Liquid. Odor No information available

Precautionary Statements

Prevention

- None

General Advice

- None

Storage

- None

Disposal

- None

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Synonyms**

C2CY

Chemical Name	CAS-No	Weight %	Trade secret
Ethylene oxide-Nonylphenol polymer	9016-45-9	> 30	*
Dipropylene glycol monomethyl ether	34590-94-8	1-5	*
Isopropyl alcohol	67-63-0	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 thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur.

Skin Contact

Wash off with warm water and soap. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

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. If swallowed, seek medical attention.

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

Large spillage: Contain spilled material if possible. After cleaning, flush away traces with 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.

Incompatible Products

Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Dipropylene glycol monomethyl ether 34590-94-8	STEL: 150 ppm TWA: 100 ppm S*	TWA: 100 ppm TWA: 600 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 600 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m ³ (vacated) S* S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m ³ STEL: 150 ppm STEL: 900 mg/m ³

Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m ³ TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m ³
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Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.
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.

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	BLUE
Odor	No information available	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	7.0	None known
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	1.019	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	300 cps	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

Incompatible products.

Incompatible materials

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

Contact with eyes may cause irritation.

Skin Contact

Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion

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

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	90 mL/kg (Rat)	-	-
Ethylene oxide-Nonylphenol polymer	= 1310 mg/kg (Rat)	= 2 mL/kg (Rabbit)	-
Dipropylene glycol monomethyl ether	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	-
Isopropyl alcohol	= 4396 mg/kg (Rat)	12800 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 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
Isopropyl alcohol		Group 3		X

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.

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	3824 mg/kg; Acute toxicity estimate
LD50 Dermal	5906 mg/kg; Acute toxicity estimate
Inhalation dust/mist	2051.7 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)
Dipropylene glycol monomethyl ether 34590-94-8		LC50 96 h: > 10000 mg/L static (Pimephales promelas)		LC50 48 h: = 1919 mg/L (Daphnia magna)
Isopropyl alcohol 67-63-0	EC50 96 h: > 1000 mg/L (Desmodesmus subspicatus) EC50 72 h: > 1000 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 11130 mg/L static (Pimephales promelas) LC50 96 h: = 9640 mg/L flow-through (Pimephales promelas) LC50 96 h: > 1400000 µg/L (Lepomis macrochirus)		EC50 48 h: = 13299 mg/L (Daphnia magna)

Persistence and Degradability No information available.

Bioaccumulation No information available.

Chemical Name	Log Pow
Dipropylene glycol monomethyl ether	-0.064
Isopropyl alcohol	0.05

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
Isopropyl alcohol	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT Not regulated

15. REGULATORY INFORMATION

International Inventories**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 %
Dipropylene glycol monomethyl ether	34590-94-8	4.31	1.0
Isopropyl alcohol	67-63-0	2.23	1.0

SARA 311/312 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

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
Dipropylene glycol monomethyl ether	X	X	X	X	X
Isopropyl alcohol	X	X	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 0	Flammability 0	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 0	Flammability 0	Physical Hazard 0	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