

# Cycle 3

## Liquid Laundry Bleach

UNI-KEM CHEMICALS, INC

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

**GENERAL DESCRIPTION:** **CYCLE 3 Liquid Laundry Bleach** is a concentrated liquid chlorine bleach for use in heavy-duty laundry applications where the extra destaining power of active chlorine is desired. **CYCLE 3** has excellent stain removal properties. When used as directed, **CYCLE 3** is safe on all cottons, linens and synthetic fabrics. **DO NOT** use on natural silk, wool or nylon fibers.

### PHYSICAL PROPERTIES:

Chemical Composition .....	Buffered sodium hypochlorite
Appearance .....	Clear yellow Liquid
pH .....	12.8
pH of 1% solution .....	9.7
Specific Gravity .....	1.223 (10.2 lbs/gal)
Penetration .....	Immediate
Solubility .....	Complete and Fast
Stability .....	90 Days @ ambient temperature
Foam .....	None
Rinsing .....	Complete
Biodegradable .....	Yes
Available Chlorine .....	12%

*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 3** liquid laundry bleach may be used either as a bleach in normal laundry operations or as a destaining presoak for blood and other difficult protein stains. **DO NOT USE ON NATURAL SILK, WOOL OR NYLON FIBERS.** Two ounces per fifty pounds of work will supply approximately 150 ppm available chlorine for positive destaining and bacteria control, **CYCLE 3** is a convenient liquid chlorine which is formulated to be used with an automa-

ed injector system. **CYCLE 3** can be used in addition to the detergent or in a separate bleach cycle. **CYCLE 3** is most effective at temperatures ranging from 145° to 155°.

### HANDLING PRECAUTIONS:

#### CAUTION: FIRST AID

#### KEEP OUT OF REACH OF CHILDREN.

Contains sodium hypochlorite. 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 a 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. Consult Material Safety Data Sheet for further information on product acceptability.

### PACKAGING:

2.5 gal plastic pail - 28 lbs net/60 lbs gross  
5 gal plastic pail - 57 lbs net/60 lbs gross  
15 gal plastic drum - 170 lbs net/176 lbs gross

Code: C3CY



# 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 3

### Other means of identification

Product Code(s) C3CY

UN-Number UN1791

Synonyms C3CY

### 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

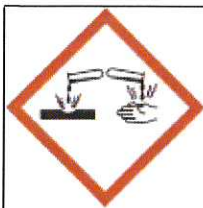
This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 1 Subcategory 1B
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**

Very toxic to aquatic life with long lasting effects

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

C3CY

Chemical Name	CAS-No	Weight %	Trade secret
Sodium hypochlorite	7681-52-9	5-15	*

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

**4. FIRST AID MEASURES**

**Description of necessary first-aid measures**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Immediate medical attention is required.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
<b>Ingestion</b>	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.

## 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** Store at room temperature. Keep container closed when not in use. Keep out of the reach of children.

**Incompatible Products** Heavy metals. Reducing agents. Acids. Do not mix with anything but water

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Control parameters**

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**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. Neoprene gloves.  
**Respiratory Protection** Particle filtering face piece

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

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Appearance</b>	Clear
<b>Odor</b>	No information available	<b>Odor Threshold</b>	No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks/ - Method</u></b>
pH	10.0	(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	1.09	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	
<b><u>Other information</u></b>		
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**

Incompatible products. Protect from light. Heat.

### **Incompatible materials**

Heavy metals. Reducing agents. Acids. Do not mix with anything but water

### **Hazardous decomposition products**

Chlorine gas acids and salts.

## 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
Water	90 mL/kg ( Rat )	-	-
Sodium hypochlorite	= 8200 mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	-

### **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
Sodium hypochlorite		Group 3		

**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****Acute Toxicity***The following values are calculated based on chapter 3.1 of the GHS document:***LD50 Oral** 6061 mg/kg; Acute toxicity estimate**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium hypochlorite 7681-52-9	EC50 24 h: = 0.095 mg/L (Skeletonekema costatum)	LC50 96 h: 0.03 - 0.19 mg/L semi-static (Oncorhynchus mykiss) LC50 96 h: 0.05 - 0.771 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: 0.06 - 0.11 mg/L flow-through (Pimephales promelas) LC50 96 h: 0.18 - 0.22 mg/L static (Oncorhynchus mykiss) LC50 96 h: 0.28 - 1 mg/L flow-through (Lepomis macrochirus) LC50 96 h: 0.4 - 0.8 mg/L static (Lepomis macrochirus) LC50 96 h: 4.5 - 7.6 mg/L static (Pimephales promelas)		EC50 48 h: 0.033 - 0.044 mg/L Static (Daphnia magna) EC50 96 h: = 2.1 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 hypochlorite	Toxic Ignitable Reactive

**14. TRANSPORT INFORMATION****DOT****UN-Number** UN1791



Proper shipping name	Hypochlorite solutions
Hazard Class	8
Packing Group	II
Reportable Quantity (RQ)	Sodium hypochlorite: RQ kg= 550.30
Description	UN1791, Hypochlorite solutions, 8, II, RQ
Emergency Response Guide Number	154

**TDG**

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	II
Description	UN1791, Hypochlorite solution, 8, II

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	II
Description	UN1791, Hypochlorite solution, 8, II

**ICAO**

UN-Number	UN1791
Proper shipping name	Hypochlorite solution
Hazard Class	8
Packing Group	II
Description	UN1791, Hypochlorite solution, 8, II

**IATA**

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	II
ERG Code	8L
Description	UN1791, Hypochlorite solution, 8, II

**IMDG/IMO**

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	II
EmS No.	F-A, S-B
Description	UN1791, Hypochlorite solution, 8, II

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	II
Classification Code	C9
Description	UN1791, Hypochlorite solution, 8, II

**ADR**

UN-Number	UN1791
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	II
Classification Code	C9
Tunnel Restriction Code	(E)
Description	UN1791, Hypochlorite solution, 8, II, (E)

ADR/RID-Labels	8
Proper Shipping Name	Hypochlorite solution
Hazard Class	8
Packing Group	II
Classification Code	C9
Special Provisions	521
Description	UN1791, Hypochlorite solution, 8, II
Limited Quantity	1 L

## 15. REGULATORY INFORMATION

### International Inventories

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

### Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - 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  
 KECL - Korean Existing and Evaluated 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	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 hypochlorite	100 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 hypochlorite	100 lb		RQ 100 lb final RQ RQ 45.4 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 hypochlorite	X	X	X		

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	Health Hazard 3	Flammability 0	Instability 1	Physical and Chemical Hazards -
<b><u>HMIS</u></b>	Health Hazard 3	Flammability 0	Physical Hazard 1	Personal Protection X

Issuing Date 07-Aug-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**

