

# Cyclon

Preparation Date: 10-Jul-2008

Revision Date: 26-May-2015

Revision Number: 1

# SAFETY DATA SHEET

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

### Product Identifier

**Product Name** Cyclon

### Other means of identification

**Item#:** 4264

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** Chlorinated alkaline detergent. Restricted to professional users.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

**Supplier** DeLaval Cleaning Solutions  
11100 N. Congress Ave.  
Kansas City, MO 64153

Tel: 816-891-7700, 8am – 5pm M-F

### Emergency Telephone Number

Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

### OSHA Regulatory Status

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

Skin Corrosion/Irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

### Label Elements

### Emergency Overview

**DANGER**

### Hazard Statements

Causes severe skin burns and eye damage

May be corrosive to metals



**Appearance** Light yellow

**Physical state** Liquid

**Odor** Slight chlorine

**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

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician  
 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  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

- May be harmful if swallowed
- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

Unknown Acute Toxicity

4% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Potassium hydroxide	1310-58-3	10 - 20%	*
Sodium hypochlorite	7681-52-9	0 - 10%	*

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

### 4. FIRST AID MEASURES

**FIRST AID MEASURES**

<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
<b>Ingestion</b>	Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms and Effects** According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

**Indication of any immediate medical attention and special treatment needed**

**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

No information available.

### Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes.

### 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

Avoid contact with skin, eyes and clothing. Use personal protective equipment.

### Environmental Precautions

Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

**Handling** Avoid contact with skin, eyes and clothing.

### Conditions for safe storage, including any incompatibilities

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

**Incompatible Materials** acids, light metals, organic materials

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Keep out of the reach of children

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	

### Appropriate engineering controls

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

### Individual protection measures, such as personal protective equipment

**Eye/face Protection** Goggles.

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Slight chlorine
<b>Appearance</b>	Light yellow	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
<b>pH</b>	14	
<b>Melting point/freezing point</b>	No information available	
<b>Boiling Point/Range</b>	No information available	
<b>Flash Point</b>	No information available	
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit</b>	No information available	
<b>Lower flammability limit</b>	No information available	
<b>Vapor Pressure</b>	No information available	
<b>Vapor Density</b>	No information available	
<b>Specific Gravity</b>	1.22	
<b>Water Solubility</b>	soluble	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient: n-octanol/water</b>	No information available	
<b>Autoignition Temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Viscosity of Product</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive Properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

### Other information

<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content</b>	No information available
<b>Density</b>	10.2 lb/gal
<b>Bulk Density</b>	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical Stability

Stable under normal conditions.

### Possibility of hazardous reactions

Gives off hydrogen by reaction with some metals (e.g. aluminum). May develop chlorine if mixed with acidic solutions.

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Incompatible Materials

acids, light metals, organic materials

### Hazardous decomposition products

Chlorine.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Inhalation</b>	No data available.
<b>Eye contact</b>	No data available.
<b>Skin contact</b>	No data available.
<b>Ingestion</b>	No data available.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide 1310-58-3	= 284 mg/kg ( Rat )	-	-
Sodium hypochlorite 7681-52-9	= 8200 mg/kg ( Rat )	10000 mg/kg ( Rabbit )	-

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Mutagenic effects** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

**Reproductive Effects** 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 Information

**Unknown Acute Toxicity** 4% of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

9.2% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Microtox	Waterflea
Potassium hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-	-
Sodium hypochlorite 7681-52-9	0.095: 24 h Skeletonema costatum mg/L EC50	LC50 (96 h) 0.06 mg/l	-	0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static 2.1: 96 h Daphnia magna mg/L EC50

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Potassium hydroxide 1310-58-3	0.65 0.83

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

<b>Waste Disposal Method</b>	Dispose of in accordance with local regulations. Should not be released into the environment.
<b>Contaminated Packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal.

**14. TRANSPORT INFORMATION****DOT**

<b>UN-No</b>	3266
<b>Proper Shipping Name</b>	Corrosive liquid, basic, inorganic, n.o.s ( Sodium hypochlorite; Potassium hydroxide )
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	TSCA
<b>DSL/NDSL</b>	DSL/NDSL
<b>EINECS/ELINCS</b>	Does not Comply
<b>ENCS</b>	Does not Comply
<b>CHINA</b>	Complies
<b>KECL</b>	Does not Comply
<b>PICCS</b>	Complies
<b>AICS</b>	Does not Comply

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

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

ENCS - Japan Existing and New 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

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide 1310-58-3	1000 lb	-	-	X
Sodium hypochlorite 7681-52-9	100 lb	-	-	X
Chemical Name	RQ	CERCLA EHS RQs		RQ
Potassium hydroxide 1310-58-3	1000	-		RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium hypochlorite	100 lb	-		RQ 100 lb final RQ

7681-52-9			RQ 45.4 kg final RQ
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**State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium hydroxide 1310-73-2	X	X	X
Sodium hypochlorite 7681-52-9	X	X	X

**U.S. EPA Label information**

EPA Pesticide registration number Not applicable

<b>16. OTHER INFORMATION</b>
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**NFPA**

Health 3

Flammability 0

Instability 1

Physical Hazard -

Preparation Date: 10-Jul-2008  
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**Revision Note**

No information available

**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 SDS**