

Issue Date: 18-Jan-2011

Revision Date: 25-Dec-2015

Version 2

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** United 416 Extra Strength Cooling Tower Concentrate

**Other means of identification**

**SDS #** UNITED-416

**UN/ID No** UN3266

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

**Recommended Use** Extra strength cooling tower concentrate.

**Uses Advised Against** For industrial and institutional use only.

**Details of the supplier of the safety data sheet**

**Supplier Address**

United Laboratories, Inc.  
320 37th Avenue  
St. Charles, IL 60174  
www.unitedlabsinc.com  
www.unitedlabsinc.ca

**Emergency Telephone Number**

**Company Phone Number** 800-323-2594 (to reorder)  
**Emergency Telephone (24 hr)** INFOTRAC 1-800-535-5053 (North America)  
1-352-323-3500 (International)

**2. HAZARDS IDENTIFICATION**

**Appearance** Brown liquid

**Physical State** Liquid

**Odor** Sharp, acrid odor

**Classification**

Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1

**Hazards Not Otherwise Classified (HNOC)**

May be harmful if swallowed.

**Signal Word**

**Danger**

**Hazard Statements**

Causes severe skin burns and eye damage.



**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.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Potassium hydroxide	1310-58-3	1-10
HEDP	2809-21-4	1-10

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Immediately call a poison center or doctor/physician.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting.

**Most important symptoms and effects**

**Symptoms** May be harmful if swallowed. Causes severe skin burns and eye damage.

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

**Notes to Physician** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Water. Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

None known.

**Hazardous Combustion Products** When strongly heated, as in a fire, this product may produce carbon monoxide, carbon dioxide, nitrogen oxides and oxides of phosphorous.

**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** Use personal protective equipment as required.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Spills should be collected to prevent contamination of waterways. Dike spill and recover quickly into suitable containers. Flush residual with large amounts of water.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store locked up. Keep this product in a properly labeled, tightly closed container. Do not allow this product to freeze, as the container may split or rupture.

**Incompatible Materials** Acids. Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Caustic Soda 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Mechanical ventilation not normally required and local exhaust is generally adequate to maintain airborne concentrations below OSHA PELs.

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

**Eye/Face Protection** Safety goggles are recommended.

**Skin and Body Protection** Chemical resistant gloves are recommended. Long sleeve shirt and long pants.

**Respiratory Protection** Use with adequate ventilation and avoid breathing vapors.

**General Hygiene Considerations** 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>Odor</b>	Sharp, acrid odor
<b>Appearance</b>	Brown liquid		
<b>Color</b>	Brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	11.5-13	
<b>Melting Point/Freezing Point</b>	No information available.	
<b>Boiling Point/Boiling Range</b>	100 °C / 212 °F	
<b>Flash Point</b>	None	
<b>Evaporation Rate</b>	~1	
<b>Flammability (Solid, Gas)</b>	Liquid-Not applicable	
<b>Upper Flammability Limits</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>	1.16	(Water = 1)
<b>Water Solubility</b>	Completely soluble	
<b>Solubility in other solvents</b>	No information available.	
<b>Partition Coefficient</b>	No information available.	
<b>Auto-ignition Temperature</b>	No information available.	
<b>Decomposition Temperature</b>	No information available.	
<b>Kinematic Viscosity</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.	
<b>VOC Content</b>	None	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous polymerization will not occur.

### Conditions to Avoid

Excessive heat and fire. Incompatible Materials.

### Incompatible Materials

Acids. Strong oxidizing agents.

### Hazardous Decomposition Products

Thermal decomposition produces oxides of phosphorus, nitrogen and carbon.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Product Information**

<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns.
<b>Inhalation</b>	Do not inhale.
<b>Ingestion</b>	May be harmful if swallowed.

**Component Information**

<b>Chemical Name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Aminotrimethylene Phosphonic Acid 6419-19-8	2100 mg/kg ( Rat )	> 6310 mg/kg ( Rabbit )	-
Potassium hydroxide 1310-58-3	214 mg/kg ( Rat )	-	-
HEDP 2809-21-4	2400 mg/kg ( Rat )	> 7940 mg/kg ( Rabbit )	-
Sodium Lignosulfonate 8061-51-6	> 40 g/kg ( Rat )	-	-
Phosphorous acid 13598-36-2	1500 mg/kg ( Rat )	-	-
Caustic Soda 1310-73-2	-	1350 mg/kg ( Rabbit )	-

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

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

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

No information available.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

No information available.

**Persistence/Degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**Other Adverse Effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	Toxic Corrosive
Caustic Soda 1310-73-2	Toxic Corrosive

**14. TRANSPORT INFORMATION**

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

**UN/ID No** UN3266  
**Proper Shipping Name** Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)  
**Hazard Class** 8  
**Packing Group** III

**IATA**

**UN/ID No** UN3266  
**Proper Shipping Name** Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)  
**Hazard Class** 8  
**Packing Group** III

**IMDG**

**UN/ID No** UN3266  
**Proper Shipping Name** Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)  
**Hazard Class** 8  
**Packing Group** III

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Potassium hydroxide	Present	X		Present		Present	X	Present	X	X
HEDP	Present	X		Present		Present	X	Present	X	X

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- 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*

**US Federal Regulations**

**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Caustic Soda 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**SARA 313**

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

**CWA (Clean Water Act)**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Caustic Soda	1000 lb			X

**US State Regulations****California Proposition 65**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium hydroxide 1310-58-3	X	X	X
Phosphorous acid 13598-36-2	X		
Caustic Soda 1310-73-2	X	X	X

**16. OTHER INFORMATION****NFPA****Health Hazards**

No information available

**Flammability**

No information available

**Instability**

No information available

**Special Hazards**

No information available

**HMIS****Health Hazards**

2

**Flammability**

0

**Physical Hazards**

0

**Personal Protection**

N+P

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Revision Note:

New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of Safety Data Sheet**