

## SAFETY DATA SHEET

### SECTION 1. IDENTIFICATION

**Product identifier used on the label**

: **Cetrimonium Chloride CETAC 30**

**Product Code(s)** : Not available.

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

: Personal care  
No restrictions on use known.

**Chemical family** : Quaternary Ammonium Compounds

**Name, address, and telephone number  
of the supplier:**

**Chemistry Connection**

253 Sturgis Road  
Conway, AR 72034  
(501) 470-9689

**Name, address, and telephone number of  
the manufacturer:**

Refer to supplier

**Supplier's Telephone #** : (501) 470-9689

**24 Hr. Emergency Tel #** : (800) 424-9300 (CHEMTREC)

### SECTION 2. HAZARDS IDENTIFICATION

**Classification of the chemical**

Clear, pale yellow liquid.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification

Skin Corrosion/Irritation - Category 2

Eye Damage/Irritation - Category 2A

Specific Target Organ Toxicity, Single Exposure - Category 3 (cns)

**Label elements**

*Hazard pictogram(s)*



*Signal Word*

WARNING!

*Hazard statement(s)*

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Causes skin irritation.  
 Causes serious eye irritation.  
 May cause drowsiness or dizziness.

*Precautionary statement(s)*

Wash thoroughly after handling.  
 Avoid breathing mist or vapours.  
 Use only outdoors or in a well-ventilated area.  
 Wear protective gloves and eye/face protection.

If on skin: Wash with plenty of soap and water.  
 If skin irritation occurs: Get medical advice/attention.  
 Take off contaminated clothing and wash it before reuse.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: get medical advice/attention.  
 If inhaled: Remove person to fresh air and keep comfortable for breathing.  
 Call a POISON CENTER or doctor/physician if you feel unwell.

Store in a well-ventilated place. Keep container tightly closed.  
 Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

Other hazards which do not result in classification:  
 Burning produces obnoxious and toxic fumes.  
 Ingestion may cause severe irritation to the mouth, throat and stomach. May cause respiratory tract irritation.

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

Mixtures

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration</u>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	Cetrimonium chloride	112-02-7	30.00

**SECTION 4. FIRST-AID MEASURES**

**Description of first aid measures**

- Ingestion* : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation* : Move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing is irregular or stopped, administer artificial respiration. When symptoms persist or in all cases of doubt seek medical advice.
- Skin contact* : For skin contact, wash with soap and water while removing contaminated clothing. If skin irritation or rash occurs, seek medical advice/attention. Wash contaminated clothing before reuse.
- Eye contact* : Flush eyes with water for at least 15 minutes while holding eyelids open. If irritation or symptoms develop, seek medical attention.

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

- : Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis. Causes skin irritation. Symptoms may include redness, blistering, pain and swelling. May cause respiratory irritation. Symptoms may include coughing, choking and wheezing. Ingestion may cause severe irritation to the mouth, throat and stomach. May cause headache, nausea, dizziness and other symptoms of central nervous system depression.

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

: Treat symptomatically. This product is a CNS depressant.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

##### *Suitable extinguishing media*

: Carbon dioxide (CO<sub>2</sub>); Dry chemical; Alcohol-resistant foam; water fog .

##### *Unsuitable extinguishing media*

: Do not use a solid water stream as it may scatter and spread fire.

#### Special hazards arising from the substance or mixture / Conditions of flammability

: Not flammable. Burning may produce irritating, toxic and obnoxious fumes.

#### Flammability classification (OSHA 29 CFR 1910.106)

: Not flammable.

#### Hazardous combustion products

: Carbon oxides and other irritating fumes and smoke. Hydrogen chloride

#### Special protective equipment and precautions for firefighters

##### *Protective equipment for fire-fighters*

: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

##### *Special fire-fighting procedures*

: Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

#### Environmental precautions

: Ecological injuries are not known or expected under normal use.

#### Methods and material for containment and cleaning up

: Ventilate the area. Prevent further leakage or spillage if safe to do so. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). For waste disposal, see Section 13 of the SDS. Contact the proper local authorities.

#### Special spill response procedures

: If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).  
US CERCLA Reportable quantity (RQ): None known.

### SECTION 7. HANDLING AND STORAGE

#### Precautions for safe handling

: Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection. Avoid breathing mist or vapor. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Keep away from extreme heat and direct flame. Keep container tightly closed when not in use. Wash thoroughly after handling. Protect from moisture. Keep away from direct sunlight.

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- Conditions for safe storage** : Store in cool/well-ventilated place. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks.
- Incompatible materials** : Oxidizing agents.

### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Exposure Limits:

<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	N/Av	N/Av	N/Av	N/Av

#### Exposure controls

##### **Ventilation and engineering measures**

- : Use with adequate ventilation. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

##### **Respiratory protection**

- : None required under normal conditions. If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Advice should be sought from respiratory protection specialists.

##### **Skin protection**

- : Gloves impervious to the material are recommended. Wear as appropriate: Any liquid-tight rubber or vinyl gloves. Advice should be sought from glove suppliers. Wear sufficient clothing to prevent skin contact.

##### **Eye / face protection**

- : Wear chemical splash goggles to prevent dusts from entering the eyes.

##### **Other protective equipment**

- : Other equipment may be required depending on workplace standards. An eyewash station and safety shower should be made available in the immediate working area.

##### **General hygiene considerations**

- : Avoid contact with skin, eyes and clothing. Avoid breathing mist or vapor. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** : Clear, pale yellow liquid.
- Odour** : Mild
- Odour threshold** : N/Av
- pH** : 3.0-4.0
- Melting/Freezing point** : N/Av
- Initial boiling point and boiling range** : N/Av
- Flash point** : >93.3°C (>200°F)
- Flashpoint (Method)** : Pensky Martens Closed Cup
- Evaporation rate (BuAe = 1)** : N/Av
- Flammability (solid, gas)** : N/Av
- Lower flammable limit (% by vol.)** : N/Av
- Upper flammable limit (% by vol.)** : N/Av
- Oxidizing properties** : None known.
- Explosive properties** : N/Av
- Vapour pressure** : N/Av

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Vapour density : N/Av  
Relative density / Specific gravity : 0.93  
Solubility in water : soluble  
Other solubility(ies) : N/Av  
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution : N/Av  
Auto-ignition temperature : N/Av  
Decomposition temperature : Not available.  
Viscosity : N/Av  
Volatiles (% by weight) : N/Av  
Volatile organic Compounds (VOC's) : N/Av  
Absolute pressure of container : N/Av  
Flame projection length : N/Av  
Other physical/chemical comments : Weight per gallon: 8.2 lb/gallon

### SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.  
Chemical stability : Stable under normal conditions.  
Possibility of hazardous reactions : Hazardous polymerization does not occur.  
Conditions to avoid : Exposure to sunlight. Avoid contact with incompatible materials.  
Incompatible materials : Oxidizing agents.  
Hazardous decomposition products : None known, refer to hazardous combustion products in Section 5.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure:

Routes of entry inhalation : YES  
Routes of entry skin & eye : YES  
Routes of entry Ingestion : YES  
Routes of exposure skin absorption : NO

#### Potential Health Effects:

##### Signs and symptoms of short-term (acute) exposure

###### *Sign and symptoms Inhalation*

: Inhalation may cause a burning sensation of the nose, throat and lungs. Symptoms may include coughing, choking and wheezing.

###### *Sign and symptoms ingestion*

: Harmful if swallowed. May cause headache, nausea, dizziness and other symptoms of central nervous system depression.

###### *Sign and symptoms skin*

: Causes skin irritation. Can cause irritation, minor itching, burning and/or redness.

###### *Sign and symptoms eyes*

: Causes severe eye irritation. Can cause irritation, redness, tearing, and blurred vision and/or eye damage.

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**Potential Chronic Health Effects**

: None known or reported by the manufacturer.

**Mutagenicity**

: Not expected to be mutagenic in humans.

**Carcinogenicity**

: No component of this product present at levels greater than, or equal to, 0.1% is identified as a carcinogen or potential carcinogen by ACGIH, IARC, OSHA, or NTP.

**Reproductive effects & Teratogenicity**

: Not expected to cause reproductive effects.

**Sensitization to material**

: Not expected to be a skin or respiratory sensitizer.

**Specific target organ effects**

: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification Specific Target Organ Toxicity, Single Exposure - Category 3 (cns)  
 May cause drowsiness or dizziness.

Not classified as a specific target organ toxicity-repeated exposure.

**Medical conditions aggravated by overexposure**

: Pre-existing skin, eye and respiratory disorders.

**Synergistic materials**

: None reported by the manufacturer.

**Toxicological data**

: The calculated ATE values for this mixture are:

ATE oral = 2330 mg/kg

<u>Chemical name</u>	<b>LC<sub>50</sub>(4hr)</b>	<b>LD<sub>50</sub></b>	
	<u>inh. rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	N/Av	699 mg/kg	4300mg/kg

**Other important toxicological hazards**

: None known or reported by the manufacturer.

### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. See the following tables for the substance's ecotoxicity data. Do not release, unmonitored, into the environment.

**Ecotoxicity data:**

<u>Ingredients</u>	<b>CAS No</b>	<b>Toxicity to Fish</b>		
		<b>LC50 / 96h</b>	<b>NOEC / 21 day</b>	<b>M Factor</b>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	112-02-7	0.19-0.29mg/L (Zebra fish)	0.094mg/L (Fathead minnow)	10

<u>Ingredients</u>	<b>CAS No</b>	<b>Toxicity to Daphnia</b>		
		<b>EC50 / 48h</b>	<b>NOEC / 21 day</b>	<b>M Factor</b>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	112-02-7	0.28 mg/L (Water flea)	0.0068 mg/L (Water flea)	10

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<u>Ingredients</u>	CAS No	<u>Toxicity to Algae</u>		
		<u>EC50 / 96h or 72h</u>	<u>NOEC / 96h or 72h</u>	<u>M Factor</u>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	112-02-7	0.11mg/L (Green algae)	0.04 mg/L (Green algae)	10

**Persistence and degradability**

: Readily biodegradable

**Bioaccumulation potential**

: No data is available on the product itself.

<u>Components</u>	<u>Partition coefficient n-octanol/ater (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride (CAS 112-02-7)	3.23	71

**Mobility in soil**

: No data is available on the product itself.

**Other Adverse Environmental effects**

: None known.

#### SECTION 13. DISPOSAL CONSIDERATIONS

**Handling for Disposal**

: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.





**Methods of Disposal**

: Dispose in accordance with all applicable federal, state, provincial and local regulations.

**RCRA**

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

#### SECTION 14. TRANSPORTATION INFORMATION

<u>Regulatory Information</u>	<u>UN Number</u>	<u>UN proper shipping name</u>	<u>Transport hazard class(es)</u>	<u>Packing Group</u>	<u>Label</u>
TDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Cetrimonium chloride	9	III	
<b>TDG Additional information</b>	None.				
49CFR/DOT	None.	Not regulated.	not regulated	none	
<b>49CFR/DOT Additional information</b>	None.				
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cetrimonium chloride)	9	III	 




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<b>IMDG Additional information</b>	None.				
<b>ICAO/IATA</b>	UN3082	Environmentally hazardous substance, liquid, n.o.s. (Cetrimonium chloride)	9	III	
<b>ICAO/IATA Additional information</b>	Refer to ICAO/IATA Packing Instruction				

**Special precautions for user** : Appropriate advice on safety must accompany the package.

**Environmental hazards** : Very toxic to aquatic life with long lasting effects. See ECOLOGICAL INFORMATION, Section 12.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
: Not applicable.

### SECTION 15 - REGULATORY INFORMATION

**US Federal Information:**

Components listed below are present on the following U.S. Federal chemical lists:

<b>Ingredients</b>	<b>CAS #</b>	<b>TSCA Inventory</b>	<b>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</b>	<b>SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:</b>	<b>SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical</b>	
					<b>Toxic Chemical</b>	<b>de minimus Concentration</b>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	112-02-7	Yes	N/Ap	N/Av	No	N/Ap

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Acute Health Hazard Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

**US State Right to Know Laws:**

The following chemicals are specifically listed by individual States:

<b>Ingredients</b>	<b>CAS #</b>	<b>California Proposition 65</b>		<b>State "Right to Know" Lists</b>					
		<b>Listed</b>	<b>Type of Toxicity</b>	<b>CA</b>	<b>MA</b>	<b>MN</b>	<b>NJ</b>	<b>PA</b>	<b>RI</b>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	112-02-7	No	N/Ap	No	No	No	No	No	No

**Canadian Information:**

Canadian Environmental Protection Act (CEPA): All ingredients listed appear on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

Canadian National Pollutant Release Inventory (NPRI): This product contains the following substances listed on the NPRI: None known.

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.





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### International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	<u>CAS #</u>	<u>European EINECS</u>	<u>Australia AICS</u>	<u>Philippines PICCS</u>	<u>Japan ENCS</u>	<u>Korea KECI/KECL</u>	<u>China IECSC</u>	<u>NewZealand IOC</u>
1-Hexadecanaminium, N,N,N-trimethyl-, chloride	112-02-7	203-928-6	Present	Present	(2)-184	KE-34535	Present	HSR003477

### SECTION 16. OTHER INFORMATION

#### Legend

: ACGIH: American Conference of Governmental Industrial Hygienists  
AICS: Australian Inventory of Chemical Substances  
CA: California  
CAS: Chemical Abstract Services  
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980  
CFR: Code of Federal Regulations  
CSA: Canadian Standards Association  
DOT: Department of Transportation  
EC50: Effective Concentration 50%.  
EINECS: European Inventory of Existing Commercial chemical Substances  
ENCS: Existing and New Chemical Substances  
EPA: Environmental Protection Agency  
HSDB: Hazardous Substances Data Bank  
IARC: International Agency for Research on Cancer  
IBC: Intermediate Bulk Container  
IECSC: Inventory of Existing Chemical Substances  
IMDG: International Maritime Dangerous Goods  
IOC: Inventory of Chemicals  
KECI: Korean Existing Chemicals Inventory  
KECL: Korean Existing Chemicals List  
LC: Lethal Concentration  
LD: Lethal Dose  
MA: Massachusetts  
MN: Minnesota  
N/Ap: Not Applicable  
N/Av: Not Available  
NIOSH: National Institute of Occupational Safety and Health  
NJ: New Jersey  
NOEC: No observable effect concentration  
NTP: National Toxicology Program  
OECD: Organisation for Economic Co-operation and Development  
OSHA: Occupational Safety and Health Administration  
PA: Pennsylvania  
PEL: Permissible exposure limit  
PICCS: Philippine Inventory of Chemicals and Chemical Substances  
RCRA: Resource Conservation and Recovery Act  
RI: Rhode Island  
RTECS: Registry of Toxic Effects of Chemical Substances  
SARA: Superfund Amendments and Reauthorization Act  
SDS: Safety Data Sheet  
STEL: Short Term Exposure Limit  
TDG: Canadian Transportation of Dangerous Goods Act & Regulations  
TLV: Threshold Limit Values  
TSCA: Toxic Substance Control Act  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Identification System

## SAFETY DATA SHEET

- References** :
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2014.
  2. International Agency for Research on Cancer Monographs, searched 2015.
  3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2015 (Chempendium, HSDB and RTECs).
  4. Material Safety Data Sheets from manufacturer.
  5. US EPA Title III List of Lists - October 2012 version.
  6. California Proposition 65 List - January 23, 2015 version.
  7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2015.

**Preparation Date (mm/dd/yyyy)**

: 06/05/2015

**Other special considerations for handling**

: Provide adequate information, instruction and training for operators.

## DISCLAIMER

Disclaimer: This 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 other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.

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