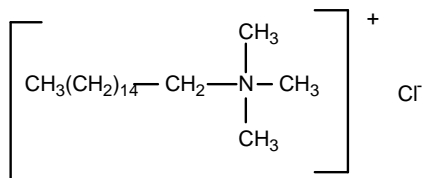


Product Name

AMMONYX[®] CETAC

Chemical Structure



Chemical Description

AMMONYX CETAC is an aqueous solution of cetyl trimethyl ammonium chloride.

CAS

112-02-7

Registry No.

INCI Name

Cetrimonium Chloride

Applications

Functional Properties

- Antistatic Agent
- Cleansing Agent
- Emulsifying Agent
- Suspending Agent
- Conditioning Agent
- Wetting Agent

End Product Uses

- Hair Conditioners (clear or opaque)
- Hair Styling Aids
- Creams and Lotions

Typical Properties

Appearance at 25°C.....	Clear pale yellow liquid	Freeze Point, °C (°F).....	3 (37)
Actives, % (MW 320).....	25.0	Cloud Point (as is), °C (°F).....	16 (61)
pH, 2% aqueous.....	3.8	Flash Point (PMCC), °C (°F).....	>94 (>201)
Color, APHA.....	50	Pour Point, °C (°F).....	6 (43)
Density, g/ml (lbs/U.S. gal).....	0.932 (7.76)	Viscosity, cps at 25°C.....	6
Boiling Point, °C (°F).....	100 (212)	RVOC, U.S. EPA, %.....	0

Environmental Effects

Product is biodegradable. Additional information is available upon request.

Health Effects

At 5% active, AMMONYX CETAC is practically non-toxic orally (LD₅₀ >5g/kg) and causes severe skin and extreme eye irritation.

Storage & Handling

Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling AMMONYX CETAC. Contact with the eyes and skin should be avoided. Wash thoroughly after handling material.

Standard Packaging: AMMONYX CETAC is available in bulk and 55 gallon drums (net weight 425 lb/193 kg).

It is recommended that AMMONYX CETAC be stored in sealed containers and kept in a dry place at temperatures below 120°F (49°C). Avoid overheating or freezing. If material is frozen, it should be heated gently and stirred to ensure it is homogeneous before use.

Bulk Storage Information: AMMONYX quaternaries can be stored in vessels of 316 stainless steel or fiberglass with a corrosion liner. Contact between quaternaries and anionic materials, soap and sulfated oils must be avoided. AMMONYX quaternaries should be stored below 120°F (49°C). An internal hairpin coil of 316 stainless steel with low pressure steam (under 50 psig) should be used if heating is required. Pumps, pipes and transfer lines should be 316 stainless steel.

Workplace Exposure

Occupational exposure can occur primarily through skin contact or via inhalation of vapors and mists. Engineering controls, personal protective equipment, and other workplace practices should be used to control these exposures.

AMMONYX CETAC is available as Kosher Certified.



Clearances

Formulations

All components of AMMONYX CETAC are listed in the following countries; the registration numbers for the active ingredients are included in parentheses: United States (TSCA 112-02-7), Australia (AICS 112-02-7), Canada (DSL 112-02-7), China (IECSC 112-02-7), Europe (EINECS 203-928-6), Japan (ENCS 2-184), Korea (ECL Serial No. KE-34535), New Zealand (NZIoC 112-02-7), and Philippines (PICCS 112-02-7).

It is the responsibility of the end user to review the chemical control regulations for each country.

CLEAR HAIR CONDITIONER

<u>Ingredients</u>	<u>Wt. % (as is)</u>	<u>Function</u>
1. AMMONYX KP	3.00	Conditioning Agent
2. AMMONYX CETAC	1.50	Conditioning Agent
3. Propylene Glycol	1.50	Humectant
4. Hydroxyethylcellulose	0.90	Thickener
5. Polyquaternium-10	0.25	Film Former
6. Fragrance, Dye, Preservative	q.s.	Additives
7. D.I. Water	q.s. to 100.0	Solvent, Carrier
8. Citric Acid (50%)	q.s.	pH Adjuster

Mixing Procedure:

Disperse Hydroxyethylcellulose in D.I. Water with mixing until clear. Add AMMONYX KP and mix until homogeneous. Slowly add AMMONYX CETAC and mix until homogeneous. Disperse Polyquaternium-10 in propylene glycol and add to above solution with mixing until clear. Adjust pH to 5.5, if necessary, with 50% citric acid. Add fragrance, dye and preservative, as desired.

Physical Properties:

Appearance at 25°C Clear liquid
pH (as is) 5.5
Viscosity at 25°C 750 cps

LIGHT SPRAY-ON DETANGLER FOR KIDS OR VERY FINE HAIR

<u>Ingredients</u>	<u>Wt. % (as is)</u>	<u>Function</u>
1. D.I. Water	q.s. to 100.0	Solvent, Carrier
2. AMMONYX CETAC	2.00	Conditioning Agent
3. Fluid 3225C	0.05	Conditioning Agent
4. Hallstar PEG-400 ML (Hallstar Co.)	0.05	Emollient
5. Fragrance, Dye, Preservative	q.s.	Additives

Mixing Procedure:

Combine all ingredients. Mix well. Adjust pH if necessary. Add fragrance dye and preservative, as desired.

Physical Properties:

Appearance at 25°C Clear liquid
pH (as is) 3.5 - 4.5

This product bulletin has been written in accordance with ACC's Product Stewardship guidelines.

Product
StewardshipAdditional
Safety
Information

A Safety Data Sheet is available upon request.



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