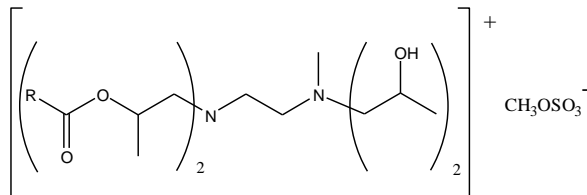


Product Bulletin

Product Name

Chemical Structure

STEPANQUAT® ML



RCO = oleic

Chemical Description

STEPANQUAT ML is the quaternary ammonium salt prepared by reacting oleic acid with Quadrol [N,N,N',N' – tetrakis (2-hydroxypropyl) ethylene-diamine], followed by quaternization with dimethyl sulfate.

CAS Registry No.

65059-61-2

INCI Name

Quaternium-82

Applications

Functional Properties

- Conditioning Agent for hair and skin applications (no “build-up” problem)
- Emulsifying agent for oil-in-water and water-in-oil emulsions
- Static Control

End Product Uses

- Hair Conditioners (regular, deep and leave-on types)
- Hair Styling Aids
- Lotions and Creams (O/W, W/O emulsion)

Typical Properties

Appearance at 25°C	Yellow to dark amber liquid		
Viscosity at 25°C, cps	8300		
Viscosity at 10°C, cps	30,500		
Density, g/ml (lbs/U.S. gal)	0.979 (8.16)		
Solids, %	94 min.		
Flash Point (PMCC), °C (°F)	>110 (>230)		
Boiling Point, °C (°F)	120 (240)		
Freezing Point, °C (°F)	<4.4 (<40)		
pH, 1% aqueous	4.0		
Solvent	Propylene Glycol		
Solubility at 25°C			
Water	Dispersible	Ethanol	Soluble
Isopropanol	Soluble	IPP	Soluble
Stability at 25°C			
Acids	Stable	Heat	Stable
Bases	Stable	Freezing	Stable

Environmental Effects

STEPANQUAT ML is relatively harmless orally (LD₅₀ >25 g/kg body wt). STEPANQUAT ML, at 3% solution, causes no eye irritation and only minimum skin irritation.

Storage & Handling

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

Standard Packaging: STEPANQUAT ML is available in bulk and drums.



It is recommended that STEPANQUAT ML be stored in sealed containers and kept at temperatures above 70°F (21°C). Avoid overheating or freezing. If material is frozen, mild heat and agitation are recommended to ensure the material is homogeneous before use.

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 safety practices should be used to control these exposures. See SDS for more information.

Clearances

The international inventories (country clearances) for STEPANQUAT ML can be found in Section 15 of the Safety Data Sheet (SDS). **It is the responsibility of the formulator to review the chemical control regulations for each country where the end product is intended to be sold or used.** If you have any further questions regarding inventories, please contact North America Technical Service at techserv@stepan.com.

Product Stewardship

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

Additional Safety Information

A Safety Data Sheet (SDS) is available upon request.



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