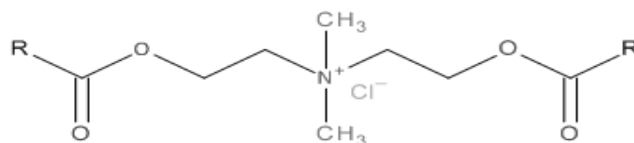


Product Bulletin

Product Name

STEPANQUAT® Helia

Chemical Structure



R = C18:1, C18:2

Chemical Description

STEPANQUAT Helia is a methyl diethanolamine (MDEA)-based esterquat derived from sunflower seed oil quaternized with methyl chloride with lauryl lactyl lactate (STEPAN-MILD® L3) and vegetable-derived glycerin added.

INCI Name

Disunfloweroylethyl Dimonium Chloride (and) Sunflower Seed Oil Glycerides (and) Lauryl Lactyl Lactate

Applications

STEPANQUAT Helia is a very mild, naturally-derived¹ cationic surfactant ideally suited for hair conditioners and skin care products. It provides excellent wet and dry combability on hair in addition to excellent detangling and a soft, conditioned feel on the hair. STEPANQUAT Helia provides substantive conditioning without build-up. In skin care applications, STEPANQUAT Helia provides a unique, soft, conditioned skin feel and emulsification for O/W emulsions.

Functional Properties

- Conditioning agent
- Oil in water emulsifier
- Feel enhancer

End Product Uses

- Hair conditioners (rinse off or leave in)
- Hair styling products
- Hair treatments
- Cationic-based lotions and creams
- Conditioning Shampoos
- Hand Soaps
- Shower Gels/Body Washes

Typical Properties

Biorenewable Carbon Index (BCI) ²	88
Actives, %	95
Solids, %	100
Appearance at 25 °C	Amber liquid
pH, 10% in H ₂ O	4.5
Density at 25 °C, g/ml (lbs/U.S. gal)	0.97 (8.10)
Flash Point, °C (°F)	147 (297)
Freeze Point, °C (°F)	0 (32)
Color, Gardner	7
Viscosity at 25 °C, cps	<500
RVOC (US EPA), %	0
Preservative	None

*Actives include Disunfloweroylethyl Dimonium Chloride, Sunflower Seed Oil Glycerides, and Lauryl Lactyl Lactate

¹ Naturally-derived refers to a product with a BCI of >50%.

² Biorenewable Carbon Index (BCI) is the number of biorenewable carbons (plant, animal or marine based) divided by the number of total carbons (natural and petroleum-based) in the idealized molecule.



Environmental Effects

Product is readily biodegradable. A detailed biodegradation statement is available upon request.

Health Effects

STEPANQUAT Helia is practically non-toxic orally (LD₅₀>5 g/kg). The product is non irritating to skin and not a skin sensitizer (hypoallergenic) at 5% active as determined by Human Repeat Insult Patch Testing (HRIPT).

Storage & Handling

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

It is recommended that STEPANQUAT Helia be stored in sealed containers and kept in a cool, dry place. Avoid overheating or freezing. If the material thickens, heat to 45 °C (113 °F) with or without mixing.

Standard Packaging: STEPANQUAT Helia is available in drums.

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.

Clearances

The international inventories (country clearances) of STEPANQUAT Helia 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 American 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 is available upon request.



The information contained herein is based on the manufacturer's own study and the works of others and is subject to change without prior notice. The information is not intended to be all-inclusive, including as to the manner and conditions of use, handling, storage or disposal or other factors that may involve additional legal, environmental, safety or performance considerations. Nothing contained herein grants or extends a license, express or implied, in connection with any patents issued or pending of the manufacturer or others, or shall be construed as a recommendation to infringe any patents. STEPAN COMPANY MAKES NO PRODUCT WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, EXPRESS OR IMPLIED, AND NO OTHER WARRANTY OR GUARANTY, EXPRESS OR IMPLIED, IS MADE, INCLUDING AS TO INFORMATION REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY, ACCURACY, COMPLETENESS, OR ADEQUACY. Stepan Company (and its employees, subsidiaries and affiliates) shall not be liable (regardless of fault) to the vendee, its employees, or any other party for any direct, indirect, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy, furnishing, use, or reliance upon information provided herein. The vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise to the fullest extent possible under the relevant law."

Stepan 
Corporate Headquarters
Northfield, Illinois 60093, U.S.A.
Phone: 847-446-7500
Fax: 874-501-2100
Website: www.stepan.com

For Technical Service Call:
Stepan North America **+1-800-745-7837**
Stepan Mexico **+55-11-5089-2208**
Stepan Quimica **+55-11-5089-2200**
Stepan Colombia **+571-636-2808**
Stepan Europe **+33-476-505-160**
Stepan Asia **+656-879-9855**
Stepan Philippines **+656-879-9855**

For Customer Service Call:
Stepan North America **+1-800-457-7673**
Stepan Mexico **+52-555-533-1967**
Stepan Quimica **+55-11-5089-2200**
Stepan Colombia **+57-6-8993125**
Stepan UK **+44-161-338-5511**
Stepan France **+33-476-50-51-00**
Stepan Philippines **+63-2-842-7951**