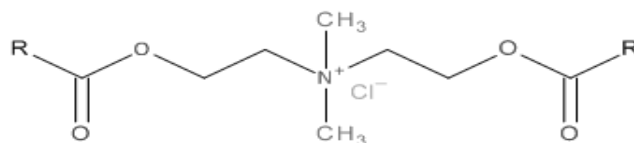


Product Bulletin

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.

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.



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