# Stepan 5. Personal Care

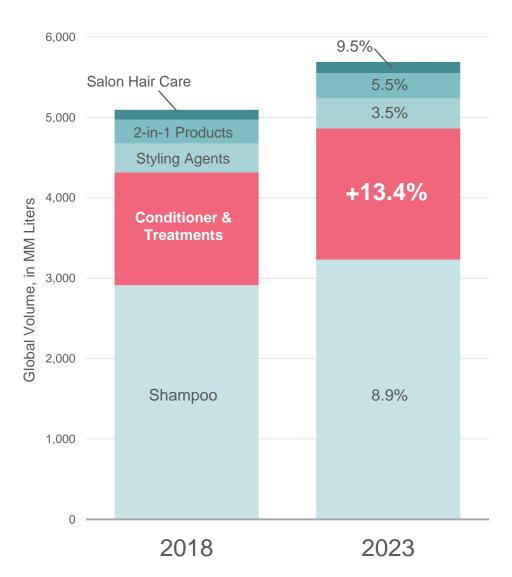
STEPANQUAT®
Helia

Better, Naturally

May 23, 2019 UL Prospector Webinar



### Double Digit Growth for Hair Conditioners by 2023





### MNCs Shift Advertising Focus to Conditioner Lines

Shown: Love Beauty and Planet™ (Unilever) and Pantene® Pro-V Intense Rescue Shots (Procter & Gamble)

### New Formats for Conditioning Treatments

Shown: Garnier® Fructis® Smoothing Treat (L'Oreal) and The Plumps Solid Conditioner (LUSH® Fresh Handmade Cosmetics)



Source: Beauty and Personal Care: Euromonitor; Accessed 5/03/2019



### Growing, Popular Claims are Ingredient-Focused



# Cationic Conditioner Benchmarks: "Plenty of Room for Improvement"

GHS Hazard Classifications	Acute Aquatic Toxicity	Chronic Aquatic Toxicity	Biodegradation	Skin Irritation	Eye Irritation	Other Hazards
Behentrimonium Chloride (BTAC)	**	**	80% degradation in 28 days			
Cetrimonium Chloride (CETAC)	***	*	93.5% degradation in 28 days			50% Active

STEPANQUAT® Helia

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

Powered by non-GMO Sunflower Oil

Creating a Better Story, Naturally

 Backed by Decades of Experience in Esterquat Technology & Manufacturing



Personal Care

# STEPANQUAT Helia a better story for the...







environment



formulator

a better story for the consumer

Non-irritating & Hypoallergenic

No build-up

Soft, manageable hair

No animal products

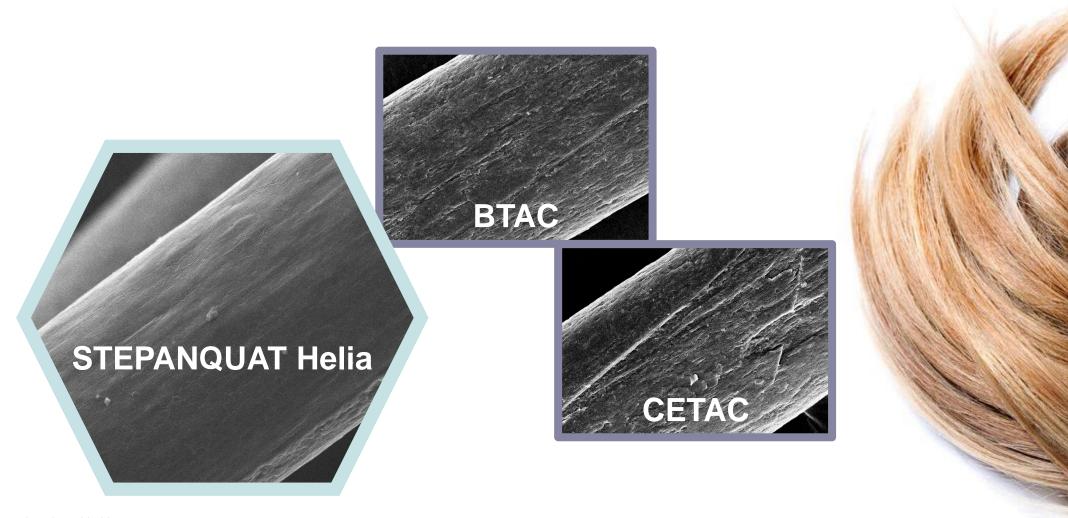
Free from:
Sulfates
Silicones
Glycols

Made from non-GMO Sunflower Oil



**Personal Care** 

### with smooth, manageable hair



BTAC = Behentrimonium chloride
CETAC = Cetrimonium chloride
Scanning Electron Microscopy images of Caucasian, slightly- bleached hair tresses treated with a 2% active conditioner at 1,000x magnification.



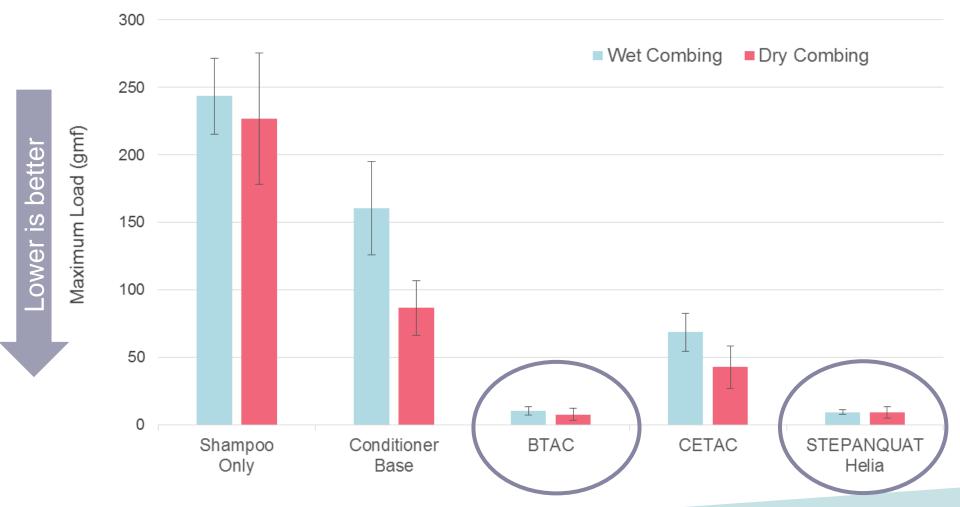
### with smooth, manageable hair

Treated with
STEPANQUAT
Helia
2% Active



**Untreated** *Shampoo Only* 

### and superior combing performance



#### Base Conditioner Formula:

Ingredient	% by weight
Deionized Water	q.s. to 100.0
Hydroxyethylcelullose	0.7
Conditioning Agent	2% active
Cetyl Alcohol	2.0
Potassium Chloride	0.5

a better story for the environment

88% bio-based from sunflower oil

Readily biodegradable

Renewable & Sustainable

No manufacturing waste streams

Better ecotoxicity than BTAC and CETAC

High active: lower transportation emissions



### a better story for the formulator

No regulatory use-level restrictions

Easy-to-use, high active liquid



No special handling requirements

#### Versatile for use in:

- Conditioners
- Treatments
- Masks
- Sprays
- Deep conditioners
- Leave-in products
- Styling products
- 2-in-1 Shampoos



### STEPANQUAT Helia Offers Plenty of Improvement

GHS Hazard Classifications	Acute Aquatic Toxicity	Chronic Aquatic Toxicity	Biodegradation	Skin Irritation	Eye Irritation	Other Hazards
Disunfloweroylethyl Dimonium Chloride  STEPANQUAT® Helia	Not Classified	No Pictogram Required	>99% degradation in 28 days	Non- Irritating	Non- Irritating	None
Behentrimonium Chloride (BTAC)	***	****	80% degradation in 28 days			
Cetrimonium Chloride (CETAC)	***	***	93.5% degradation in 28 days			

All data above is from the European Chemical Agency. Disunfloweroylethyl Dimonium Chloride: EC 620-174-7 Behentrimonium Chloride: EC 271-756-9 Cetrimonium Chloride: EC 203-928-6



Overnight Hair Treatment Spray with Avocado Oil

Formulation No. 1301

**Daily Smoothing Conditioner** 

Formulation No. 1297

Goodness, Gorgeous! Hair Mask with Matcha & Egg Yolk Formulation No. 1309



#### **Overnight Hair Treatment Spray with Avocado Oil**

Formulation No. 1301

Wake up with soft, hydrated hair so that you can style and go! Simply spray this Overnight Hair Treatment onto damp or dry hair and work through with your hands. This treatment, powered by naturally-derived STEPANQUAT Helia and patent-pending technology, work while you sleep to hydrate and condition dry, damaged hair.

Ingredient	% by weight	Function
Deionized Water	q.s. to 100.00	Carrier
Hydroxyethylcelullose	0.20	Thickener
Glycerin	0.30	Feel Enhancer
STEPANQUAT Helia	2.50	Naturally-Derived Conditioning Agent
Avocado Oil	0.25	Natural Oil
Panthenol	0.40	Feel Enhancer
Fragrance, Preservative, Citric Acid	q.s.	Aesthetics



Appearance: Off-white, flowable liquid

pH, as is: 4.0-4.5

Viscosity: 70-150 cps



#### **Example INCI Label**

Water (Aqua), Disunfloweroylethyl Dimonium Cloride, Sunflower Seed Oil Glycerides, Persea Gratissima (Avocado) Oil, Lauryl Lactyl Lactate, Glycerin, Panthenol, Hydroxyethylcellulose, (Preservative), (Fragrance)



#### **Daily Smoothing Conditioner**

Formulation No. 1297

A daily use, smoothing conditioner for normal to fine hair. This simple yet powerful silicone-free formula conditions and smooths hair strands to make every day a good hair day.

Ingredient	% by weight	Function
Deionized Water	q.s. to 100.00	Carrier
Potato Starch Modified	3.00	Thickener
STEPANQUAT Helia	1.75	Naturally-Derived Conditioning Agent
Cetearyl Alcohol	3.50	Bodifier
STEPAN-MILD® L3 Lauryl Lactyl Lactate	0.50	Natural Silicone Alternative
Potassium Chloride	0.50	Viscosity Modifier
Fragrance, Preservative, Citric Acid	q.s.	Aesthetics

#### Typical Properties at 25°C

Appearance: Off-white, viscous lotion

pH, as is: 3.5-4.5

Viscosity: 8,000-12,000 cps



#### **Example INCI Label**

Water (Aqua), Cetearyl Alcohol, Potato Starch Modified, Disunfloweroylethyl Dimonium Chloride, Sunflower Seed Oil Glycerides, Lauryl Lactyl Lactate, Potassium Chloride, (Fragrance), (Preservative)

#### **Goodness, Gorgeous!** Hair Mask with Matcha & Egg Yolk

Formulation No. 1309

Green tea is just as good for your hair as it is for your health! Compounds in matcha (powdered green tea) stimulate your hair follicles for potential aid in hair growth. For even more goodness, this hair mask uses STEPANQUAT Helia, a modern, naturally-derived conditioning agent that is better for your hair and the environment.

Ingredient	% by weight	Function
Deionized Water	q.s. to 100.00	Carrier
Hydroxyethylcelullose	1.5	Thickener
STEPANQUAT Helia	2.5	Naturally-Derived Conditioning Agent
Stearyl Alcohol	5.0	Bodifier
Cetearyl Alcohol	2.0	Bodifier
STEPAN-MILD® GCC Glyceryl Caprylate/Caprate	0.5	Natural Emollient
Avocado Oil	0.2	Natural Oil
Jojoba Oil	0.2	Natural Oil
Potassium Chloride	0.50	Viscosity Modifier
Matcha Powder	1.0	Additive
Egg Yolk Powder	0.2	Additive
Fragrance, Preservative, Citric Acid	q.s.	Aesthetics



Viscosity: 8,000-15,000 cps



Appearance: Green, viscous lotion

pH, as is: 3.5-4.5

#### **Example INCI Label**

Deionized Water, Stearyl Alcohol, Cetyl Alcohol, Hydroxyethylcellulose, Disunfloweroylethyl Dimonium Chloride, Camellia Sinensis (Matcha) Leaf Powder, Sunflower Seed Oil Glycerides, Glyceryl Caprylate/Caprate, Lauryl Lactyl Lactate, Simmondsia Chinensis (Jojoba) Seed Oil, Persea Gratissima (Avocado) Oil, Egg Yolk Powder, Potassium Chloride, Citric Acid, [Preservative], Fragrance





## Visit Stepan Company's booth to learn more about STEPANQUAT Helia in Skin Care!

### Formulation Guidance

- For best results, add STEPANQUAT Helia after thickeners (i.e., hydroxyethylcellulose, guars) and before long-chain alcohols
- Keep pH above 3.0 to avoid hydrolysis
- Can add to 2-in-1s or conditioning cleansers after the anionic surfactants – incorporate pearl or opacifying agent
- Avoid heating formula above 75°C (color bodies may form)

### Formulation Guidance

#### **PROSPECTOR®**

### Want to Make Your Own?

Find these formulations on UL Prospector!



Ħ	STEPANQUAT® <b>Helia</b>	Stepan Company	Disunfloweroylethyl Dimonium Chloride (and) Sunflower Seed Oil Glycerides (and) Lauryl Lactyl Lactate	STEPANQUAT® <b>Helia</b> is a modern hair conditioning agent that is better for your hair and the environment. It is a very mild, naturally-derived cationic surfactant ideally suited for hair conditioners and skin care products. It provides excellent wet and dry <u>view more</u>
	<u>Daily Smoothing Conditioning</u> (Formulation #1297	Stepan Company		A daily use, smoothing conditioner for normal to fine hair. This simple yet powerful silicone-free formula conditions and smooths hair strands to make every day a good hair day. This formula features STEPANQUAT® <b>Helia</b> and STEPANMILD® L3.
	Rich Conditioning Hair Mask (Formulation #1298)	Stepan Company		This deep-treatment hair conditioning mask is designed to be used once a week to moisturize dry, thirsty hair with a sunflower-oil based conditioner and natural oils. This formula features STEPANQUAT® <b>HELIA</b> and STEPAN-MILD® GCC.
	Overnight Hair Treatment Spray with Avocado Oil (Formulation #1301)	Stepan Company		Wake up with soft, hydrated hair so that you can style and go! Simply spray this Overnight Hair Treatment onto damp or dry hair and work through with your hands. This treatment, powered by naturally-derived STEPANQUAT® <b>Helia</b> and patent-pending technology,view more

### Commercial Availability

#### **North America**

USA (cosmetic use only)
Canada (registration pending)
Mexico

#### **South America**

All Countries

Commercial samples available





Enter Search Keywords

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Samples (0)

Home > Personal Care & Cosmetics > STEPANQUAT® Helia

#### STEPANQUAT® Helia

Company: Stepan Company · INCI Name: Disunfloweroylethyl Dimonium Chloride (and) Sunflower Seed Oil Glycerides (and) Lauryl Lactyl Lactate

Tags:



#### **DOCUMENTS**



STEPANQUAT® Helia Datasheet



**STEPANQUAT®** Helia

#### **FORMULATIONS**

<u>Daily Smoothing Conditioning (Formulation #1297</u>

Overnight Hair Treatment Spray with Avocado Oil (Formulation #1301)

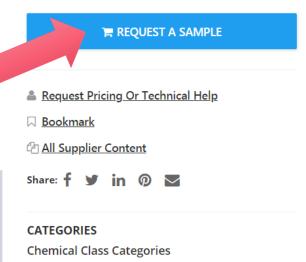
Rich Conditioning Hair Mask (Formulation #1298)

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

#### **View Regulatory & Retailer Information** in Prospector

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STEPANQUAT® Brassica

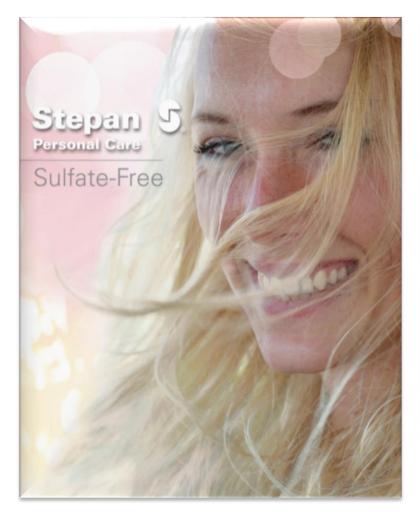
Global Inventory Compliance

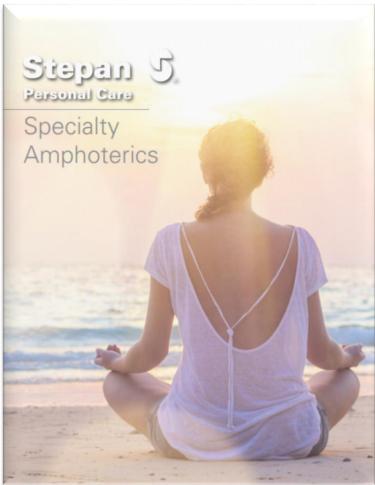
Better Story, Naturally

Made from Rapeseed Oil



### www.stepan.com/personalcare







### Stepan 5 **Personal Care**

To learn more: www.go.stepan/helia

### Thank You! Sarah Kovach

Senior Market Manager, Personal Care Stepan Company skovach@stepan.com



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