

StellaThix™

The Most Powerful Biodegradable Surfactant Thickener
Ever Created



StellaThix

INCI: Sorbeth-230 Pentastearate (and) Cocamide MEA

Lot#20553023

applechem
Create Possibilities

2 Cranberry Road, Unit A4
Parsippany, NJ 07054, USA
Tel: 862-210-8344
Fax: 862-210-8336
Sales@applechem.com



Create Possibilities

StellaThix

A Powerful Breakthrough in
Surfactant Thickening Technology



Experience Unparalleled Formulation Flexibility and Efficiency

Meet Stellathix, the breakthrough star-shaped polymeric thickener designed for both sulfated and sulfate-free surfactants in mass market cleansing formulations. Leveraging advanced polymer expertise - typically exclusive to higher priced thickeners used in luxury cleansers - Stellathix is a formidable **10 times more potent** than ordinary thickeners used in mass-market shampoos.

🍏 Game-Changing Thickening Efficiency

StellaThix offers 10 to 15 times more thickening efficiency compared to cheap economy thickeners like PEG-150 Diistearate in mass market sulfated shampoos, and 2 to 3 times more powerful than advanced non-ionic thickeners used in challenging sulfate-free surfactant systems.

🍏 Versatility and Compatibility

StellaThix's unique polymer structure enables it to thicken any type of surfactant system with incredible efficiency, even when adding in ingredients that would normally de-stabilize cleansing formulations. This efficiency creates both formulation flexibility and significant cost savings for mass market shampoos.

🍏 Eco-Friendly, Biodegradable, Non-Microplastic

Stellathix is the only non-ionic thickener on the market classified as Ultimately Biodegradable by ISO 14851 standards, and is not considered a microplastic according to new EU environmental regulations. It represents a giant leap in safe sustainable ingredients for mass market cleansers.



Additional Benefits

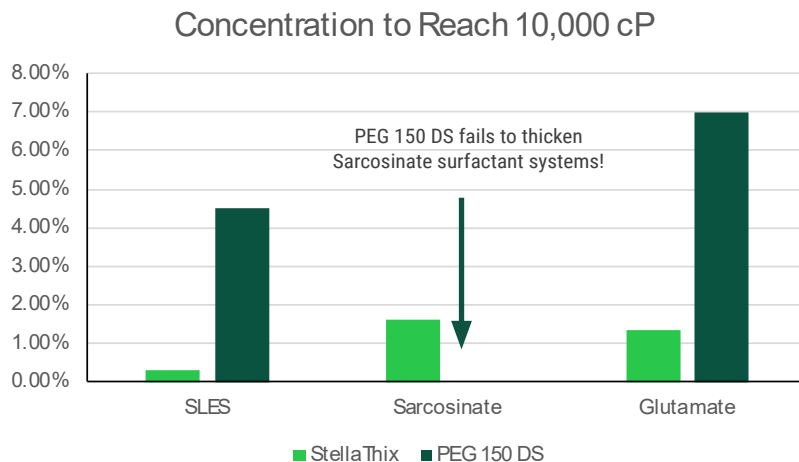
- 🍏 **Mild and Non-Irritating**
- 🍏 **Reduce usage of surfactants and detergents while still maintaining viscosity**
- 🍏 **Easily incorporate high fragrance levels, essential oils, polyol humectants, and other challenging ingredients without affecting viscosity and clarity**
- 🍏 **Compatibility with all anionic, cationic, non-ionic surfactants and thickeners**

Performance Comparison

Verses PEG Distearates

- 🍏 PEG Distearates are inexpensive, but require significantly more usage to match viscosity. They are less effective in challenging surfactants, and high use levels affect texture and user experience.

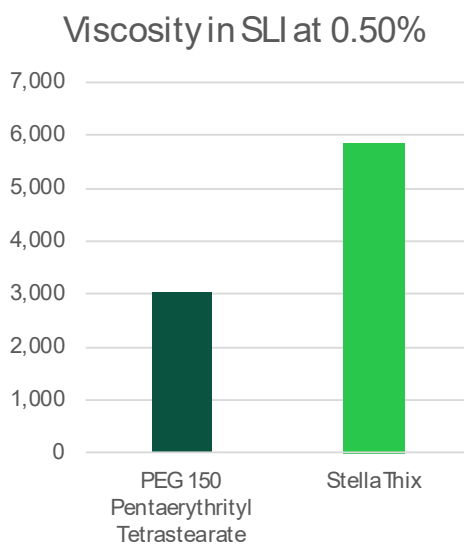
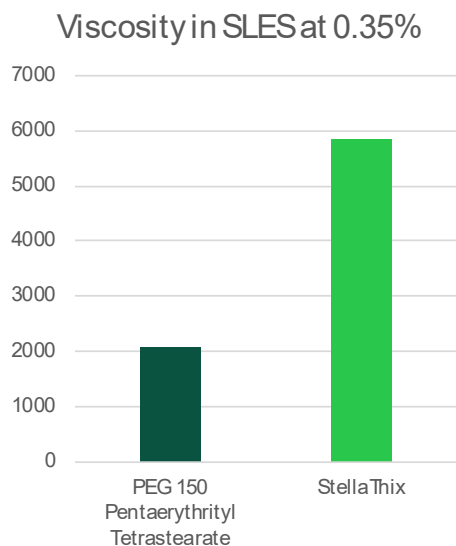
Stellathix resolves all of these issues at a fraction of the usage rate.



Verses PEG 150 Pentaerythrityl Tetrastearate

- 🍏 Older non-ionic thickeners are harder to use with performance that scales poorly in more modern surfactant systems.

Stellathix retains its excellent efficacy regardless of the surfactant system.



Stella LuxValue Shampoo (SH-007)

Crafted with precision and care, this shampoo promises to deliver gentle cleansing and moisturization through nourishing actives. On par with the industry's leading brands, this economical shampoo achieves high end sensory and appearance using affordable surfactants and leverages the extreme thickening power StellaThix offers. Luxury performance with mass market formulation costs!

StellaThix offers unparalleled thickening efficacy, and enables the use of a polymeric thickener at levels no alternatives can operate at without additional additives. Compatible with acrylate suspending agents, pearlzers, cationic guar and more!

Specifications

- 🍏 Viscosity: 11,500 cP
- 🍏 pH: 6.0 - 6.5
- 🍏 50°C oven: 1 month stable
- 🍏 Freeze-Thaw: Passed 3 Cycles

PHASE	INCI NAME (TRADE NAME)	SCG USAGE (WT%)
A	Distilled Water	66.34
	Acrylates Copolymer (Carbopol® Aqua SF-1 Polymer)	1.50
	Sodium Laureth Sulfate (70% Active)	12.00
	NaOH (18%)	Q.S.
B1	STELLATHIX	0.26
B2	Cocamidopropyl Betaine (35% active)	10.50
C	Glycerin	1.00
	Hydroxypropyl Guar Hydroxypropyltrimonium Chloride	0.10
	Distilled Water	1.00
D	Glycol Distearate (and) Laureth-4 (and) Cocamidopropyl Betaine (Euperlan® PK 4000)	2.00
	POLLUSTOP®	1.00
	FUCOGEL® 1.5P	1.00
E	Wild Currant & Orange Perfume (Creative 8661)	2.00
	Sodium Chloride	1.00
	Disodium EDTA	0.10
	Preservative (DMDM Hydantoin)	0.20
F	Citric acid to pH 6.5	Q.S.

Processing Method

- Set and heat water bath to 70-80 Celsius. Add Phase A to a beaker and mix at 70-80 Celsius until homogeneous (450-550 rpm).
- Neutralize the Carbopol Aqua SF-1 with 18% NaOH solution (in Phase A). Next, add SLES (70%) to beaker and mix for 5 minutes (150-200 RPM) using an anchor impeller.
- Add StellaThix (phase B1) and stir with propeller at 350-500 rpm for 25 min to 1 hour at 65-80 Celsius.
- Add Phase B2 and continue mixing for 5 minutes (150-250 RPM).
- Pre-mix phase C and add to batch, mix for 10-15 minutes.
- Add Phase D and mix for 5-10 minutes (300-450 RPM)
- Begin cooling and add phase E once temperature reaches 40 Celsius.
- Gently mix for 5 minutes and adjust pH to 6.0-6.5.