



COCONUT INGREDIENTS

CLEAN · GREEN · SUSTAINABLE



Coco Surfactant

100% coconut-derived surfactants that deliver excellent cleansing property with proven mildness for home, personal and institutional products.



SULFATE-FREE CLEANSERS PRIMARY SURFACTANTS



SUFRAVON 820

Potassium Cocoate (and)
Potassium Palmitate
Home Care Formulations

SUFRAVON 874

C12 - C18 Potassium Soap
Home Care Formulations

SUFRAVON 890

Potassium Cocoate (and)
Potassium Oliviate
Personal Care Formulations

SUFRAVON 840GV2

Potassium Cocoate (C12 - C18)
Home Care Formulations

SUFRAVON 868/869

Potassium Cocoate
Personal/Home Care Formulations

SUFRAVON 875

Potassium Laurate
Personal Care Formulations



FOAMIER SOLUTIONS

FOAM BOOSTER

SUFRAMIDE 307

Cocamide Methyl MEA (CMMEA)
80% Active, Nitrosamine-free
EO-free, DEA-free

SUFRAMIDE 301/300/305

Cocomonoethanolamide (CMEA)
85-95% Active, Nitrosamine-free
EO-free, DEA-free

SUFRAMIDE 1050

Coco MIPA
100% Active, Nitrosamine-free
EO-free, DEA-free, MEA-free

SUFRAMIDE 182/190/191

Cocodiethanolamide (CDEA)
82-90% Active
EO-free

MILD WASHES

WIDE PH RANGE SURFACTANTS

SUFRASOFT CB30

Cocamidopropyl Betaine, 30%

SUFRASOFT A0100

Cocamidopropylamine Oxide

SUFRASOFT A0250

Cocamine Oxide

SUFRASOFT CB140

Cocamidopropyl Betaine, 30%
(C12-C18)

SUFRASOFT A0200

Lauramine Oxide

Coco Functional Ingredients

Expertly customized functional ingredients that enhance product quality and appearance to achieve aesthetically pleasing sensory qualities and remarkable results.

SPECIAL FEATURES

- Cold-processable
- Compatible with a wide range of surfactants
- Allergen-free and non-GMO
- Enhances the luxurious feel of formulations



GLYSOFT RG

Refined Glycerin
100% Coconut-derived glycerin

GLYSOFT SF

Cocoglycerides
Superfating and superior thickening agent

NEOSOFT SD/CD

Stearamidopropyldimethylamine Lactate / Cocamidopropyldimethylamine Lactate
Cationic surfactant as a conditioning agent in hair care products

PEARLUX PB

Cold-processable
pearlizing agent

PEARLUX EGDS

Glycol Distearate
Superior pearling agent compatible with a wide range of surfactants

EMULSIER GMS 100/200

Glyceryl Stearate
Low HLB emulsifier

EMULSIER GML

Glyceryl Laurate
Coconut-derived emulsifier



Talk to our experts:
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www.natura-aeropack.com



Learn more about our sustainable ingredients

Natura Aeropack Corporation

NATURA AEROPACK
CORPORATION

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Coco Emollients

PETROLEUM-FREE MOISTURIZER

Naturally-derived skin protecting and caring intermediate products.
Smoothens and moisturizes the skin resulting in lower transepidermal water loss.

Cocolatum

SKIN PROTECTANT



Natural and petroleum-free, helps retain skin moisture.
Use as an ointment to help treat rashes, eczema and other related skin disease.

COCOLATUM 501

For intense moisturization

COCOLATUM 503

100% plant-derived for intense moisturization

Glyzer CB100

COCONUT BUTTER

Natural coconut butter for intensive moisturization.
Can be used for skin care and hair care products like body butter, body wash, hair conditioner, lip balm, etc.



Glyzer CT

COCO MCT



Helps maintain skin moisture, resulting in a more supple and healthy appearance. Additionally, it is an effective carrier for UV filters and pigments in skincare and cosmetics products.

GLYZER CT100

Light emollient

GLYZER CT200

Medium-spreading emollient

GLYZER CT500

UV filter dispersing agent and solubilizer

GLYZER CT600

Excellent fragrance carrier

COCOLATUM SKIN PROTECTANT

PRODUCT	INCI NAME	APPLICATION
COCOLATUM 501	Cocoglycerides, <i>Cera alba</i> (Beeswax), <i>Euphorbia cerifera</i> (Candelilla) Wax	Moisturizer, Ointment, Lubricant, Hand Balm, Body Butter
COCOLATUM 503	Cocoglycerides (and) <i>Oryza sativa</i> (Rice) Bran Wax (and) <i>Euphorbia cerifera</i> (Candelilla) Wax	Moisturizer, Ointment, Lubricant

GLYZER CT SKIN CARE EMOLLIENTS

PRODUCT	INCI NAME	APPLICATION
GLYZER CT100	Caprylic/Capric Triglycerides	Baby Oil, Face Oil, Beauty Elixir
GLYZER CT200	Caprylic/Capric/Lauric Triglycerides	Light Body Oil, Massage Oil
GLYZER CT500	Cocoglycerides	UV Filter and Pigment Solubilizer
GLYZER CT600	Tricaprylin	Essential oil and Fragrance Carrier

GLYZER CB SKIN MOISTURIZER

PRODUCT	INCI NAME	APPLICATION
GLYZER CB100	<i>Cocos nucifera</i> (Coconut) Seed Butter	Body Butter, Body Wash, Hair Conditioner, Lip Balm

Coco Actives

PLANT-BASED ACTIVE INGREDIENTS

Earth-conscious ingredients that are proven to be effective in solving challenges in skin care, hair care, and home care.

PRODUCT	INCI NAME	APPLICATION
SUFRAQUAT FS50I	Dialkylester Ammonium Methosulfate	Fabric Softener (cost-efficient, easy to disperse)
SUFRAQUAT FS100I	Dialkylester Ammonium Methosulfate	Fabric Softener (excellent softening property)
SUFRAQUAT FS200I	Dialkylester Ammonium Methosulfate	Fabric Softener (improves the viscosity significantly)
SUFRAQUAT BK80	Benzalkonium Chloride (80% Active)	Cleaning facilities, equipment, and surfaces
SUFRAQUAT BK50	Benzalkonium Chloride (50% Active)	Cleaning facilities, equipment, and surfaces
NATPRO 9000	Glyceryl Caprylate (and) Glyceryl Caprate (and) Glyceryl Laurate (and) Caprylhydroxamic Acid	Natural Preservative



More than a factory
A green philosophy
Game changing facilities
Towards carbon neutral

Coco Specialty Bases

Ecopure

RINSE OFF | SULFATE-FREE SYSTEM

Naturally-derived surfactant system with good cleaning and foaming ability. It has excellent rinsing ability, reducing build-up that causes growth of harmful microorganisms. Mild, safe to use, and environmentally-friendly.

PRODUCT	INCI NAME	FUNCTION
ECOPURE SB10	Potassium Cocoate (and) Cocamide MEA (and) Cocamidopropyl Betaine (and) Glycerin (and) Cocoglycerides	Mild Soap Base
ECOPURE SB20	Potassium Cocoate (and) Lauryl Glucoside (and) Glycerin (and) Cocoglycerides	Tear-free Soap Base
ECOPURE SB30	Potassium Cocoate (and) Sodium Lauroyl Sarcosinate (and) Cocamide MEA (and) Cocamidopropyl Betaine (and) Cocoglycerides (and) Stearamidopropyl Dimethylamine Lactate	Clear Soap Base for Personal Care
ECOPURE SB30P	Potassium Cocoate (and) Sodium Lauroyl Sarcosinate (and) Cocamide MEA (and) Cocamidopropyl Betaine (and) Cocoglycerides (and) Stearamidopropyl Dimethylamine Lactate (and) Glycol Distearate	Pearlized Soap Base for Personal Care
ECOPURE SB40	Potassium Cocoate (and) Cocamide MEA (and) Sodium Citrate	Soap Base for Home Care
ECOPURE SB50	Potassium Cocoate (and) Sodium Lauroyl Sarcosinate (and) Cocamide MEA (and) Stearamidopropyl Dimethylamine Lactate (and) Cocoglycerides	High Foaming Soap Base
ECOPURE LP10	Cocamidopropyl Betaine (and) Glycerin (and) Stearamidopropyl Dimethylamine Lactate	Low pH Surfactant Base
ECOPURE WP20*	Cocamide MEA (and) Lauramine Oxide	Wide pH Surfactant Base
ECOPURE CMB100/200	Cocamide MEA (and) Cocamidopropyl Betaine (and) Glycerin	Concentrated Foam-boosting Surfactant

LEAVE ON | COLD PROCESSABLE EMULSION BLEND

Easy to use emulsion concentrates for creams and lotions. Provides extra moisture to smoothen the skin.

PRODUCT	INCI NAME	FUNCTION
ECOPURE LE*	Caprylic/Capric Triglyceride (and) Glyceryl Stearate (and) PEG-100 Stearate	Light Cream Base
ECOPURE HE*	<i>Cocos nucifera</i> (Coconut) Seed Butter (and) Glyceryl Stearate (and) PEG-100 Stearate	Heavy Cream Base

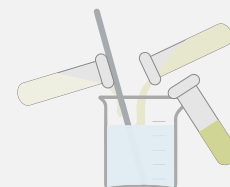
PROCEDURE



Recommended dosage: 30-40%
*ECOPURE WP20, LE, HE recommended dosage: 10-25%



Add water



Add

Preservatives: 0.1-1.0%
Fragrance: 0.1-1.0%
Thickener: 0.5-5.0%

1

2

3

Cocolatum

Moisturizing Skin Protectant



Extra moisturizing

Does not build up on skin

With natural antibacterial property



Raw material verified by ECOCERT GREENLIFE, conform to the COSMOS Standard.

Cocolatum

Moisturizing Skin Protectant

Cocolatum 501

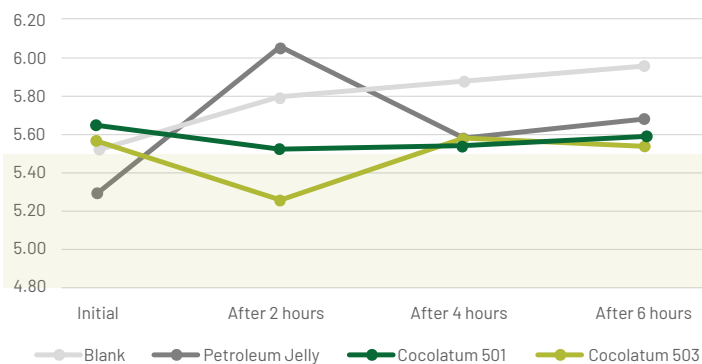
Cocoglycerides (and) *Cera alba* (Beeswax)
(and) *Euphorbia cerifera* (Candelilla) Wax

Cocolatum 503

Cocoglycerides (and) *Euphorbia cerifera*
(Candelilla) Wax (and) *Oryza sativa* (Rice) Bran Wax

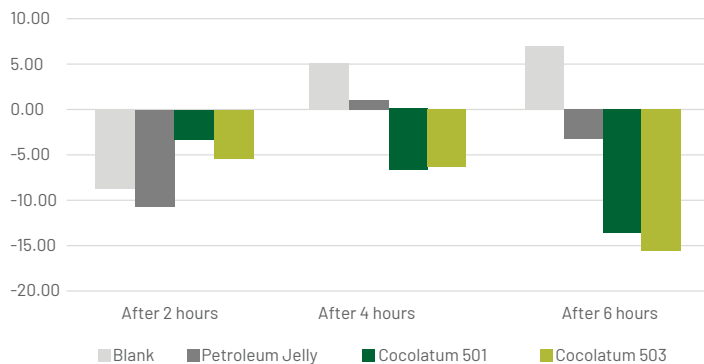


SKIN pH



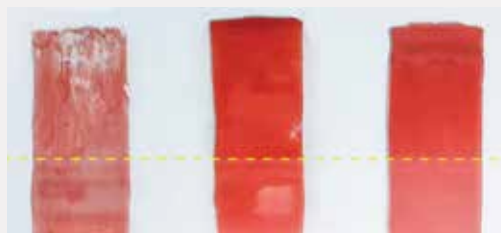
The graph above shows Cocolatum 501 and Cocolatum 503 have lowered the skin pH to the range of 4.7 to 5.75, which is the optimal pH of the skin.

ERYTHEMA (REDNESS OF SKIN)



Increasing erythema value indicates skin irritation. The graph above shows that Cocolatum 501 and 503 can lower the erythema (redness) of the skin.

WASHING OFF ABILITY

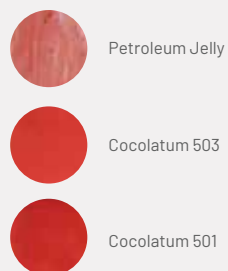


Petroleum Jelly Cocolatum 501 Cocolatum 503

The panel was immersed in a surfactant solution for 24 hours. The Cocolatum 503 sample washed off the panel most easily.

COLOR DISPERSION

INCREASING DISPERSING ABILITY



SPREADABILITY



Petroleum Jelly Cocolatum 501 Cocolatum 503

The samples were applied to the filter paper and left to spread for 5 minutes. Cocolatum 501 and 503 have good spreading ability against petroleum jelly.

SAMPLE FORMULATION EGG LIP BALM

MATERIALS	INCI NAME	%
Cocolatum 503	Cocoglycerides (and) <i>Euphorbia cerifera</i> (Candelilla) Wax (and) <i>Oryza sativa</i> (Rice) Bran Wax	89.40
Candelilla Wax	<i>Euphorbia Candelilla</i> wax	6.00
Cetyl Alcohol	Cetyl Alcohol	2.00
Glyzer CT200	Caprylic/Capric/Lauric Triglyceride	1.00
Strawberry flavor	Flavor	0.50
Cream flavor	Flavor	0.50
Vitamin E Acetate	Tocopheryl Acetate	0.50
Red 6 Lake	CI 15850	0.10
		TOTAL: 100

PROCEDURE

Load Cocolatum 503, Candelilla wax, Cetyl Alcohol and Glyzer CT200 into a single vessel and heat. Continuously stir during melting until temperature reaches 65°C to 70°C and until appearance becomes homogeneous. Cool down to 40°C. Add in the flavors and colorants and continuously stir until homogeneous and no lumps of pigment remain.

PHYSICAL APPEARANCE

Appearance	Soft solid balm
Color	Pink

Clyzer CT

Coconut Light Emollients



Light and non-tacky

Mild and moisturizing

Excellent UV filter and pigment dispersant



Raw material verified by ECOCERT GREENLIFE, conform to the COSMOS Standard.

Glyzer CT

Coconut Light Emollients



Glyzer CT is a range of natural emollients derived from sustainable coconut oil that is readily biodegradable. Each emollient is a good substitute for cyclic siloxanes which possess environmental and health issues. **Glyzer CT** contains Lauric acid that is known for its good antimicrobial property. The range can be used in leave-on personal care products as emollient for cream and lotion, and as replacement for petroleum-derived mineral oil.



Dermatologically tested as mild and gentle



Derived from natural and sustainable raw materials




Has natural antibacterial property due to Lauric acid



Mild and light, suitable for dry and oily skin

PHYSICO-CHEMICAL PROPERTIES

BRAND NAME	INCI NAME	DESCRIPTION
Glyzer CT600	Tricaprylin	Essential oil and fragrance carrier
Glyzer CT100	Caprylic/Capric Triglyceride	Light spreading emollient
Glyzer CT200	Caprylic/Capric/ Lauric Triglyceride	Medium spreading emollient with Lauric acid
Glyzer CT500	Cocoglycerides	UV filter solubilizer and pigment dispersing agent 

APPLICATION PROPERTIES

SMOOTHENING AND REPAIRING PROPERTY

BEFORE APPLICATION



AFTER APPLICATION



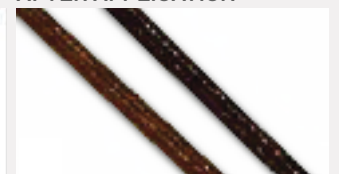
The damaged hair strand has open hair cuticles resulting in rough texture. Upon application of **Glyzer CT100**, the strands became smooth keeping hair cuticles intact.

IMPROVING HAIR SHINE

BEFORE APPLICATION

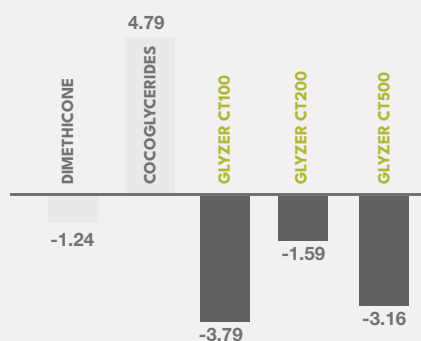


AFTER APPLICATION



Glyzer CT200 improves the shine of the hair strands, leaving a thin film on each strand.

TRANSEPIDERMAL WATER LOSS

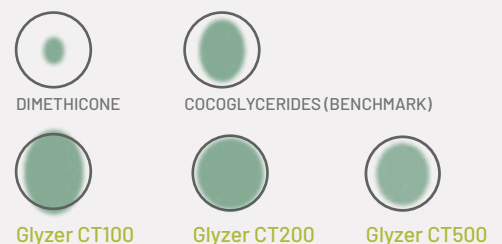


A negative change in TEWL value means a decrease in the amount of water loss by the skin, indicative of better moisture retention by use of **Glyzer CT**.

Glyzer CT range has better moisturizing property than Dimethicone and Cocoglycerides.

Glyzer CT100 has the most decrease in TEWL, hence, the best moisturizing emollient.

SPREADABILITY



Among all the samples, **Glyzer CT100** has the best spreading ability, followed by **Glyzer CT200**

Glyzer CB100

Coconut Butter



Mild and moisturizing

Melts on the skin

Light colored and odorless



Raw material verified by ECOCERT GREENLIFE, conform to the COSMOS Standard.

Glyzer CB100

Coconut Butter

Natural coconut butter for intensive moisturization. Can be used for skin care and hair care products like body butter, body wash, hair conditioner, lip balm, etc.



MOISTURIZING

Lowers transepidermal water loss of the skin



NATURAL

Coconut-derived emollient



LIGHT COLOR

Does not affect the color of the end product



FRAGRANCE FREE

No coconut smell



NON-TACKY

Stays on top of the skin and non-greasy

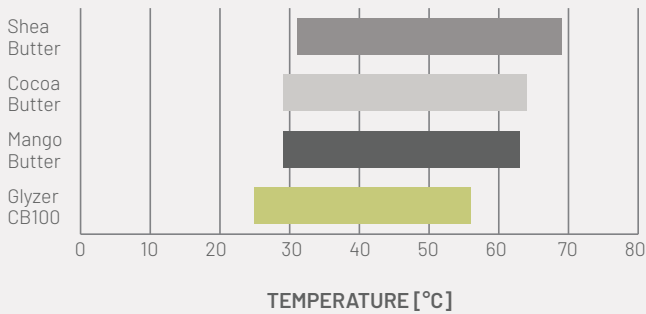


MELTS ON SKIN

Low melting point, closer to body temperature

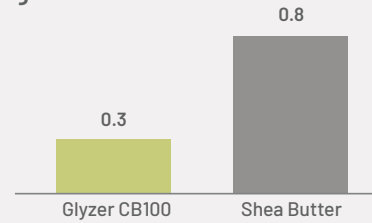
PHYSICO-CHEMICAL PROPERTIES

MELTING POINT RANGE



TEWL/MEASUREMENT

g/h/m²



The lower the TEWL value, the better the skin's ability to hold moisture.

Lotion with **Glyzer CB100** has lower TEWL than the lotion with Shea Butter. This means that **Glyzer CB100** can improve skin's ability to retain moisture.

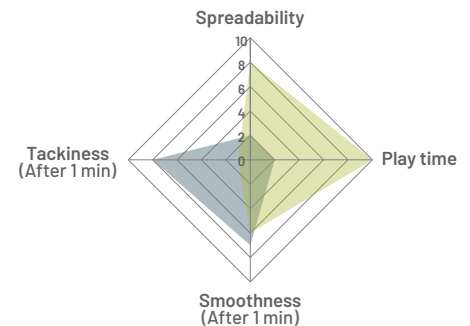
Glyzer CB100 has lower melting point than the rest of the samples. It is also closer to body temperature which means it can be easily spread on skin and will impart less greasy feel.

FORMULATION

	INGREDIENTS	INCI NAME	FUNCTION	%
Phase A	Demineralized Water	Aqua	Diluent	q.s to 100
	Chelating Agent	Methylglycinediacetic Acid	Chelating Agent	0.10
Phase B	Glysoft RG	Glycerin	Humectant	5.00
	Polymer Thickener	Sodium Acrylates Copolymer (and) Lecithin	Rheology Modifier	1.00
	Gum	Xanthan Gum	Rheology Modifier	0.50
Phase C	Glyzer CB100	<i>Cocos nucifera</i> (Coconut) Seed Butter	Emollient	5.00
	Cetyl Alcohol	Cetyl Alcohol	Emulsifier	2.00
	Glyzer CT200	Caprylic / Capric / Lauric Triglycerides	Emollient	10.00
	Emulsifier System	Glyceryl Stearate Citrate, Polyglycerol Polyricinoleate, Sorbitan Isostearate, Triethylhexanoin	Emulsifier	1.00
	Vitamin E	Tocopheryl Acetate	Antioxidant	0.10
Phase D	Fragrance		Fragrance	0.20
	Preservative	Phenoxyethanol (and) Ethylhexylglycerin	Preservative	0.80
	Lactic Acid	Lactic Acid	pH Modifier	q.s

SENSORY EVALUATION

GLYZER CB100 VS. SHEA BUTTER



■ Body Lotion (with Shea Butter)
■ Body Lotion (with Glyzer CB100)

PROCEDURE

In two separate containers, mix all ingredients under Phase A and Phase B.
Combine Phase A and B and heat to 70°C.
In a separate vessel, heat Phase C to 70°C.
Once fully melted, add Phase C to Phase AB, and cool down to 40°C.
At 40°C add Phase D to Phase ABC.

Sufravon

Plant-based Cleansing Surfactant



Sulfate-free

Moisturizing

Non-irritating



Raw material verified by ECOCERT GREENLIFE, conform to the COSMOS Standard.



Sufravon

Plant-based Cleansing Surfactant

PRIMARY SURFACTANT | ANIONIC SURFACTANT

Sufravon functions as a primary or secondary surfactant - making it an excellent component in personal care and homecare formulations.



APPLICATIONS

- Baby Soap
- Shampoo
- Liquid Body Soap
- Hand Soap
- Homecare Formulation



Exceptional foaming & cleansing properties



Compatible with a wide range of surfactants



Easy to rinse, less water usage



Excellent stain removing property

HAIR QUALITY

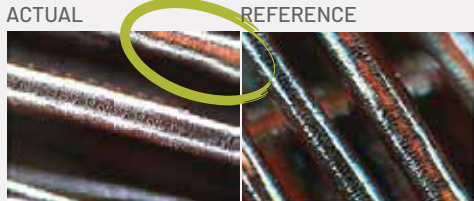
SUFRAVON 869



Hair Cuticle Results



SLES



Hair Cuticle Results



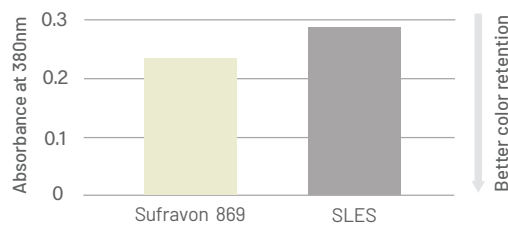
Results: A healthier hair cuticle was detected when treated with a 10% active solution of **Sufravon 869** than SLES. The encircled part indicates that the hair cuticle was damaged by applying SLES solution.

SUFRAVON VARIANTS

PRODUCTS	SUFRAVON 820	SUFRAVON 840GV2*	SUFRAVON 874*	SUFRAVON 868*
INCI Name	Potassium Cocoate (and) Palmitate	Potassium Cocoate (C12 - C18)	C12 - C18 Potassium Soap	Potassium Cocoate
Main Composition	Coconut Oil (and) Palm Oil	Fractionated Coconut Oil	Coconut Oil (C12 - C18)	Coconut Oil
pH	9 - 11	10 - 11	9.5 - 10.5	9.5 - 10.5
Applications	Home Care	Home Care	Home Care	Home Care, Personal Care

PRODUCTS	SUFRAVON 869*	SUFRAVON 890*	SUFRAVON 875
INCI Name	Potassium Cocoate	Potassium Cocoate (and) Oliviate	Potassium Laurate (High Lauric Acid)
Main Composition	Coconut Oil	Coconut Oil (and) Olive Oil	Coconut Oil
pH	7.5 - 8.5	9 - 11	9.5 - 10.5
Applications	Personal Care, Baby Care, Pet care	Personal Care, Baby Care, Pet Care	Personal Care

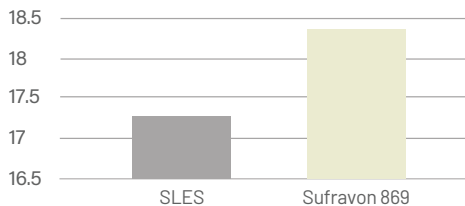
HAIR SHAMPOO EVALUATION: HAIR COLOR RETENTION BURGUNDY SHADE



Blank: 10% active of surfactant sample
Procedure: Color treated hair tress was submerged in the solution for 10 minutes. Then the UV absorbance of the rinsate was measured using UV-Vis Spectrophotometer

The rinsate with SLES has higher absorbance than the rinsate with **Sufravon 869**. This means that **Sufravon 869** can improve hair color retention better than SLES.

FOAM HEIGHT (CM) VS SLES



Surfactant Actives: 2% CDEA, 10% Betaine, 12% Test Sample (active content)

Foam height of **Sufravon 874** is better than SLES.



Sufrasoft AO

Amine Oxide Surfactant

Excellent foam booster

Viscosity builder

Wide pH range



Sufrosoft AO

Amine Oxide Surfactant

AMPHOTERIC FOAM BOOSTER & VISCOSITY BUILDER

Sufrosoft is a coconut-derived amphoteric surfactant with excellent foam boosting and viscosity building ability even in hard water. It can be used in a wide range of pH and is compatible with all types of surfactants, making it ideal for both personal and home care applications.

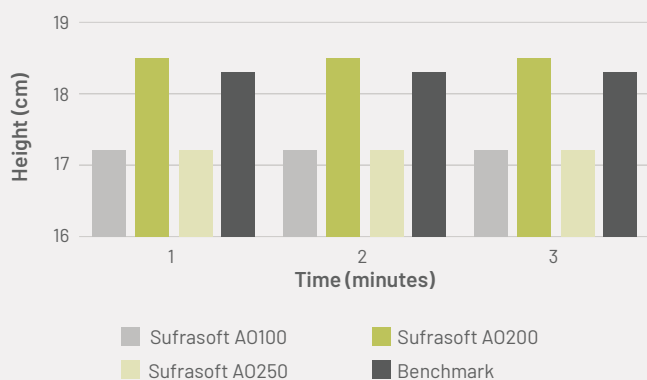


VARIANT	INCI NAME	RECOMMENDED DOSAGE
SUFRASOFT A0100	Cocamidopropylamine Oxide	0.5% - 15.0%
SUFRASOFT A0200	Lauramine Oxide	0.5% - 15.0%
SUFRASOFT A0250	Cocamine Oxide	0.5% - 15.0%

FORMULATION COMPATIBILITY

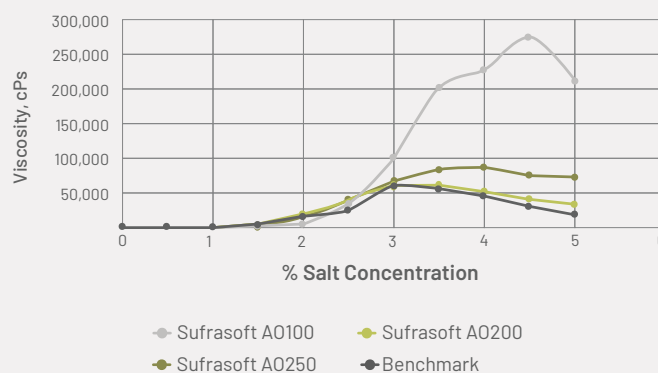
VARIANT	ACID STABLE	ALKALI STABLE	HYDROGEN PEROXIDE COMPATIBLE	SODIUM HYPOCHLORITE COMPATIBLE
Sufrosoft A0100	✓	✓	✓	
Sufrosoft A0200	✓	✓	✓	✓
Sufrosoft A0250	✓	✓	✓	✓

FOAM HEIGHT (1% SOLUTION)



Sufrosoft A0200 has the highest foam among all the samples. Stable foam height was observed for all the samples tested.

SALT CURVE PROFILE



The system with **Sufrosoft A0100** has the highest viscosity with the addition of 4.5% of salt. Second to the highest is **Sufrosoft A0250**, while **Sufrosoft A0200** and the benchmark samples are comparable.

Neosoft

Cationic Conditioning Surfactant

Does not build up
on hair

Reduces hair static

Compatible with a wide
range of surfactants



Neosoft

Cationic Conditioning Surfactant

Neosoft is a plant-based hair conditioning active. It is a cold-processable conditioning active for hair conditioner, conditioning shampoo and hair mask formulations. Delivered in liquid form for easy addition in the formulation.



PHYSICO-CHEMICAL PROPERTIES

BRAND	INCI NAME	SOURCE	DOSAGE	% ACTIVE
Neosoft SD	Stearamidopropyl Dimethylamine Lactate	Palm	2 - 10 %	20% min
Neosoft CD	Cocamidopropyl Dimethylamine Lactate	Coconut	0.5 - 5 %	90% min

SMOOTHENS HAIR

Lessens hair static & makes hair more manageable



NO BUILD UP

Easy to remove with shampoo and does not build up on hair & scalp



EASY TO USE

Liquid at room temperature and water soluble



TREATS HAIR

Closes hair cuticle for more tamed hair shaft



FRAGRANCE-FREE

Odorless
*Neosoft SD only



NON-TACKY

Light & non-greasy.
Does not weigh hair down

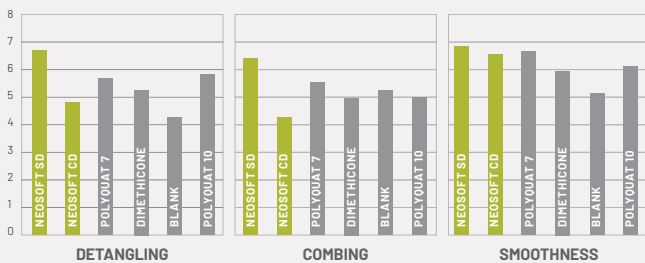
APPLICATION BENEFITS

SENSORY EVALUATION

Conditioning Agent	Recommended Dose (in%)	Dosage used (Median Value)
Polyquaternium 7	2 - 5	3.5
Polyquaternium 10	0.25 - 0.5	0.375
Neosoft SD	2 - 10	6
Neosoft CD	0.5 - 5	2.75
Dimethicone	0.5 - 5	2.75

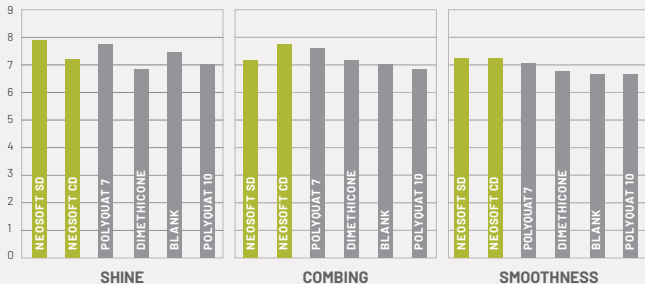
NO. OF PANELISTS: 7

WET HAIR PROPERTIES



For all wet hair properties, Neosoft SD has outperformed all other hair conditioning agents. Neosoft CD gave comparable results to Polyquat 7 and Neosoft SD in terms of smoothness.

DRY HAIR PROPERTIES

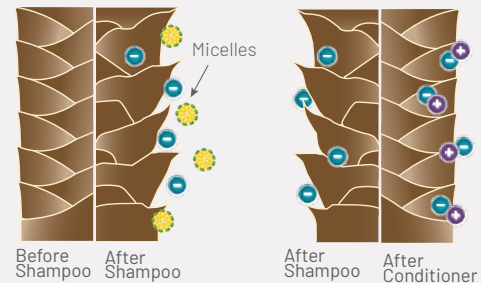


Out of all the hair conditioning agents, Neosoft SD outperformed them all when it comes to shine. The best performing conditioning agent when it comes to dry combing is Neosoft CD. Neosoft CD and Neosoft SD tied as the best in hair smoothing effect, outperforming Polyquat 7.

MECHANISM OF ACTION

(A) Effect of anionic surfactant on hair

(B) Effect of cationic surfactant on hair



The effect of anionic and cationic surfactants on the hair cuticle.

(A) Anionic surfactants in shampoo may cause the hair cuticles to slightly open, this is due to the surplus of negative charges generating static electricity leading to frizz and friction.

(B) Cationic surfactant (Neosoft CD) releases a positive charge that neutralizes the negative charge on the hair cuticle forming a neutral, hydrophobic, cationic-anionic complex. This reduces the static electricity and relaxes the hair cuticle, making it smooth and less frizzy.

SAMPLE FORMULATION

HAIR CONDITIONER

	MATERIALS	INCI NAME	%
Phase A	Deminerlized Water	Aqua	q.s
	Chelating Agent	Methylglycinediacetic Acid	0.10
	Glysoft RG	Glycerin	2.00
Phase B	Cetyl Alcohol	Cetyl Alcohol	5.00
	Glyzer CT200	Caprylic/Capric/Lauric Triglyceride	3.00
	BTAC	Behentrimonium Chloride	2.00
Phase C	CTAC	Cetrimonium Chloride	3.00
	Neosoft SD	Stearamidopropyl Dimethylamine Lactate	2.00
	Antioxidant	D-Panthenol	0.50
	Preservative	Phenoxyethanol(and) Ethylhexylglycerin	0.80
	Vacuum Salt	Sodium Chloride	0.50

TOTAL: 100

PROCEDURE

Phase A: Load Water in a clean container. Add Ion Ligand and Glysoft RG, Heat to 65-70°C.

Phase B: In a separate container, combine Cetyl Alcohol, Glyzer CT200, BTAC and CTAC. Heat to 65-70°C.

Mix Phase A and Phase B

Cool down to 40-45°C.

Load Neosoft SD, Antioxidant, Preservative and Vacuum Salt.

Pearlux PB

Liquid Pearlizing Agent

Sulfate-free

Cold processable

Compatible with a wide range of surfactants



Pearlux

PB10·PB20·PB40

Liquid Pearling Agent

Pearlux PB10

Potassium Cocoate (and) Glycol Distearate (and) Cocamide MEA Sulfate, PEG, and EO-free

Pearlux PB40

Glycol Distearate (and) Sodium Laureth Sulfate (and) Laureth 10 (and) Cocamide MEA Optimum pearling effect

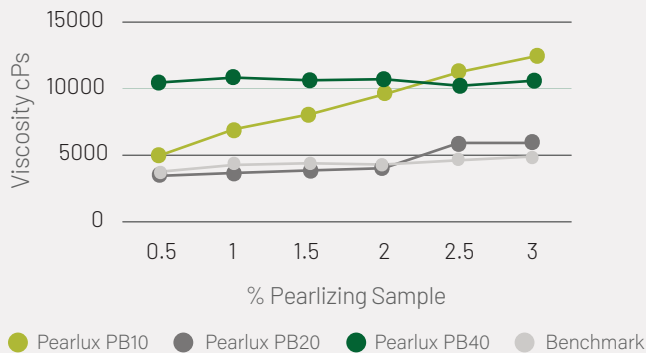
Pearlux PB20

Potassium Cocoate (and) Glycol Distearate (and) Cocamide MEA (and) Laureth-10 Sulfate and PEG free, provides more opaque and pearling effect



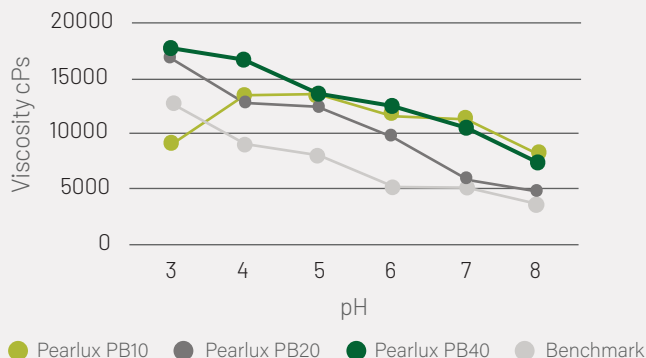
- Offers smooth luster and shimmering effect on personal care and cosmetic products
- Cold-processable and easy to disperse
- Enhances product viscosity
- Can be used in a wide range of pH
- Naturally-derived from sustainable coconut oil
- Environmentally friendly

VISCOSITY PROFILE IN SLES SURFACTANT SYSTEM (15% SLES / 5% Betaine / 5% CMEA)



The viscosity of the system increases as the amount of **Pearlux PB10**, **Pearlux PB20** and Benchmark increases. Pearlux PB10 has the highest viscosity among the three samples.

VISCOSITY PROFILE AT DIFFERENT PH (15% SLES / 5% Betaine / 5% CMEA)



The viscosity of the surfactant system decreases as the pH of the sample becomes more basic

DEGREE OF WHITENESS



FORMULATION

MATERIALS	INCI NAME	%
Water	Aqua	q.s
SLES 70%	Sodium Lauryl Ether Sulfate	15.00
Sufamide HF750	Cocamide MEA	5.00
Sufrosoft CB30	Cocamidopropyl Betaine	5.00
Glysoft RG	Glycerin	5.00
D-Panthenol		5.00
Fragrance		0.50
Preservative		0.10
Pearlux PB20	Potassium Cocoate (and) Glycol Distearate (and) Cocamide MEA (and) Laureth-10	1.00
Vacuum Salt	Sodium Chloride	1.20
10% Citric Acid	Citric Acid	q.s

PROCEDURE

Mix all the raw materials in the given order.

PHYSICAL APPEARANCE

Appearance	Pearlized viscous liquid
pH (as is)	6.98
Viscosity, cPs	6,800 min

Sufraquat FS

Coconut-Derived Esterquat

Improves fabric softness

Better scent retention

Coconut-derived



Sufraquat FS

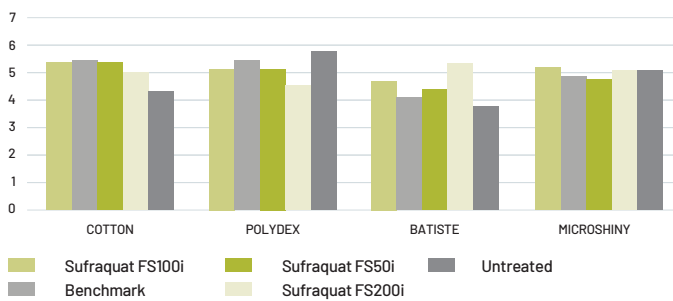
Coconut-Derived Esterquat

DIALKYLESTER AMMONIUM METHOSULFATE

Coconut-derived esterquat used as an active for fabric softener. It provides excellent smoothness on various types of fabric by getting rid of static. It does not build up on clothes, promoting good rewetting ability.



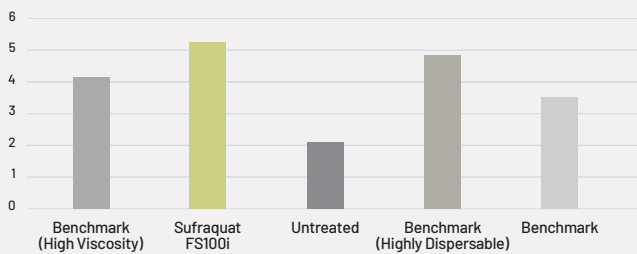
VARIANTS	END-PRODUCT APPEARANCE	EASE OF HANDLING	END-PRODUCT VISCOSITY
Sufraquat FS50i	Slightly Translucent		
Sufraquat FS100i	Opaque White		
Sufraquat FS200i	Opaque White		



CLOTH SOFTNESS

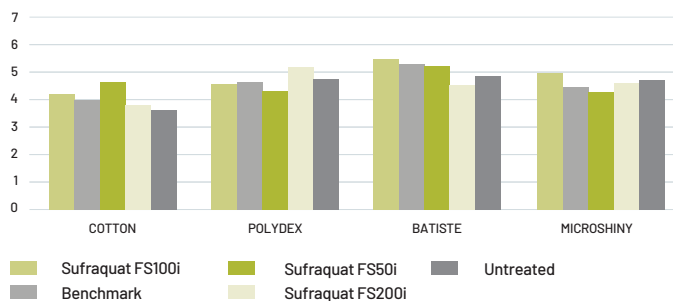
Sufraquat FS100i, FS50i, and Benchmark (High Viscosity) are comparable in softening cotton. Benchmark (High Viscosity) is better in polydex fabric.

Sufraquat FS100i and FS200i are better in batiste and microshiny fabrics.



SCENT RETENTION

Sufraquat FS100i outperformed Benchmark (High Viscosity), Benchmark (Highly Dispersable) and Benchmark in retaining scent in the fabric.



WRINKLE REDUCTION

Sufraquat FS50i has the best performance in cotton fabric. Sufraquat FS200i has the best performance in polydex fabric. Sufraquat FS100i has the best performance in batiste fabric.

Say goodbye to static cling and chafing with Sufraquat FS! Sustainable, coconut-derived fabric softener actives.

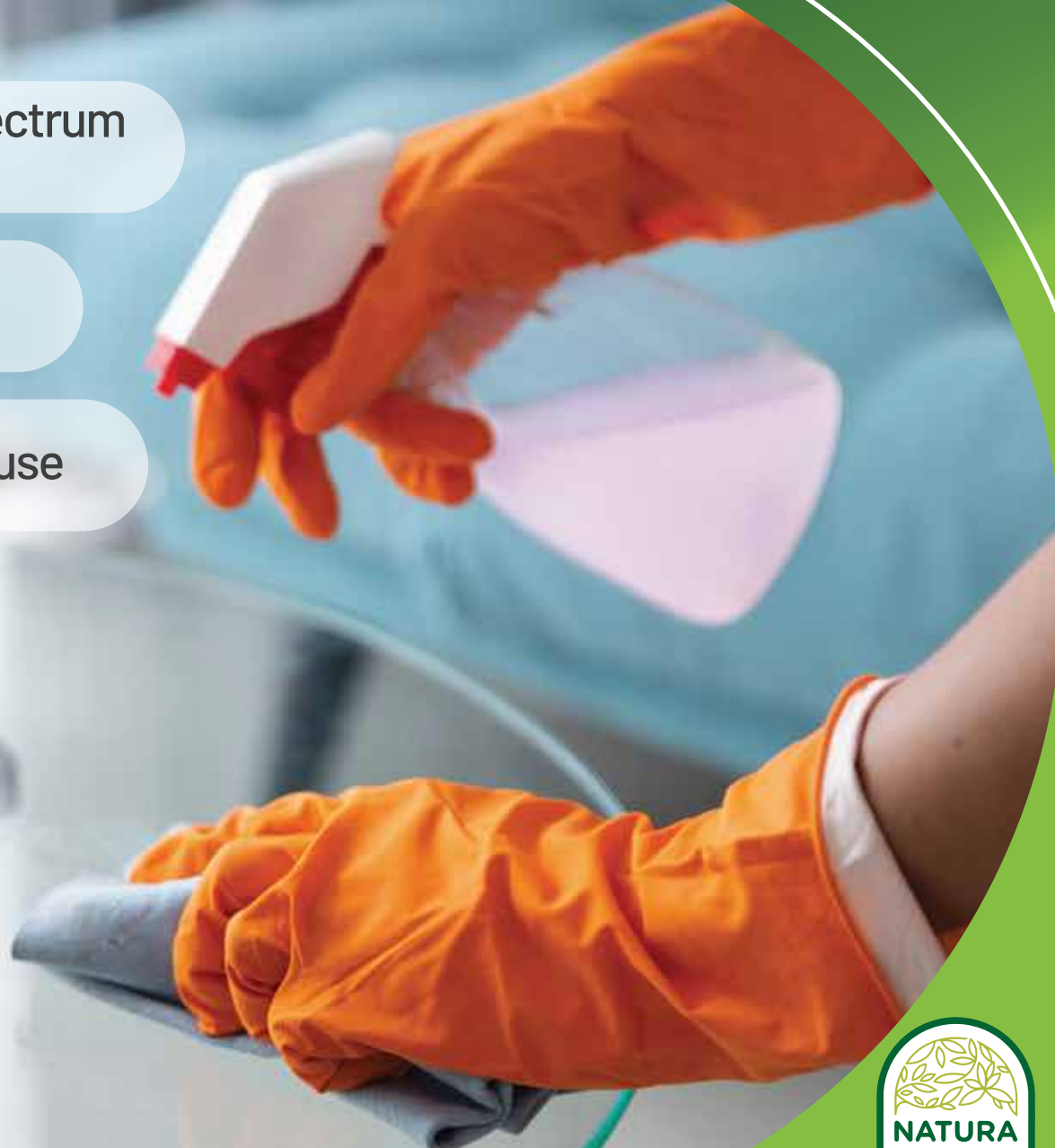
Sufraquat BK

Coconut-Derived Disinfectant

Potent broad-spectrum
disinfectant

Compatible for
various surfaces

Safe and easy to use





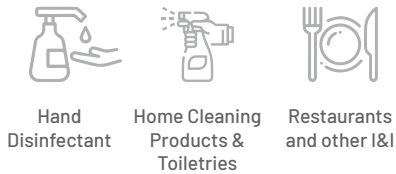
Sufraquat BK

Coconut-Derived Disinfectant

BENZALKONIUM CHLORIDE

Potent, long-lasting, and broad-spectrum disinfecting active based on quaternary benzalkonium chloride salt. It is coconut-derived, biodegradable, and non-toxic to users and the environment. **Sufraquat BK** is optimal for cleaning facilities, equipment, and surfaces.

APPLICATIONS



FEATURES & BENEFITS



VARIANT	PERCENT ACTIVE	RECOMMENDED DOSAGE
SUFRAQUAT BK80	80% Active	0.125% 0.025%*
SUFRAQUAT BK50	50% Active	0.2% 0.04%*

*For no-rinse application in food industry

THIRD PARTY LABORATORY TEST RESULTS

TEST ORGANISM	CFU/ML (CONTROL)	CFU/ML AT 5 MINUTES CONTACT TIME	% KILL
<i>Escherichia coli</i> ATCC 25922	6.6×10^8	< 1	99.99%
<i>Pseudomonas aeruginosa</i> ATCC 19429	8.4×10^9 est	24	99.99%
<i>Staphylococcus aureus</i> ATCC 12600	1.4×10^9	< 1	99.99%
<i>Salmonella enterica</i> ATCC 14028	1.1×10^{10} est	< 1	99.99%
<i>Listeria monocytogenes</i> ATCC 19115	1.0×10^{10} est	< 1	99.99%



NatPro

Natural Preservative

Potent antimicrobial active

Multifunctional

Plant-based



NatPro

9000·8000

A multi-functional, broad-spectrum natural preservative used for the formulation of cosmetic products. It also functions as a co-emulsifier and refatting active.

NatPro 9000

Glyceryl Caprylate (and) Glyceryl Caprate (and) Glyceryl Laurate (and) Capylhydroxamic Acid
Natural Preservative

NatPro 8000

Glyceryl Caprylate (and) Glyceryl Caprate (and) Glyceryl Laurate
Preservative Booster



Natural Preservative



Natural co-emulsifier & superfatting active



Effective at pH range of 4.0 - 7.0



Light color and low odor

THIRD PARTY LABORATORY TEST RESULT

DETERMINATION OF MINIMUM INHIBITION CONCENTRATION

CONCENTRATION	<i>BACILLUS SP.</i> (From Cosmetics)	<i>S. AUREUS</i>	<i>E. COLI</i>	<i>K. PNEUMONIEA</i>	<i>E. AEROGENES</i>	<i>P. AERUGINOSA</i>	<i>C. ALBICANS</i>
2.00%	-	-	-	-	-	-	-
1.50%	-	-	-	-	-	-	-
1.00%	-	-	-	-	-	-	-
0.70%	-	-	-	-	-	-	-
0.50%	-	-	-	-	+	+	-
0.00%	+	+	+	+	+	+	+

Formulators may increase **NatPro 9000** dosage to achieve a certain product quality and to further lessen the microbial susceptibility of the formulation. But regardless of the desired final product attributes, formulators may start at 0.70% **NatPro 9000** dosage in the formulation to ensure effective product preservation.

PRESERVATIVE EFFICACY TEST

TEST ORGANISM	INITIAL COUNT (CFU/g)	VIABLE PLATE COUNT, COLONY-FORMING UNITS (CFU/G)			
		DAY 7	DAY 14	DAY 21	DAY 28
<i>Escherichia coli</i> ATCC 25922	3.4×10^6	<10	<10	<10	<10
<i>Enterobacter aerogenes</i> ATCC 35029	2.1×10^6	<10	<10	<10	<10
<i>Pseudomonas aeruginosa</i> ATCC 27853	2.7×10^6	<10	<10	<10	<10
<i>Staphylococcus aureus</i> ATCC 6538	2.7×10^6	<10	<10	<10	<10
<i>Candida albicans</i> ATCC 10231	1.8×10^5	<10	<10	<10	<10
<i>Aspergillus niger</i> UPCC 4219	4.6×10^4	1.4×10^2	<10	<10	<10

When challenged with a cocktail of different test microorganisms in a body butter formulation at 1.5%, **NatPro 9000** was able to decrease the number of test organisms from Day 0 to Day 28. It is an effective preservative since:

A. It showed more than 3 log reduction from the initial count at 14th day, and no increase from 14th day to 28th day of bacterial load.

B. It showed no increase in yeast and molds count from the initial to the 28th day.

NatPro 9000 can therefore be used as an effective preservative in USP category 2 products, and even for category 1 products.