# Star shield sunscreen 4-in-1 Expected SPF 30





Face care

Sun care

Crafted with lightweight, non-greasy texture and broad -spectrum SPF protection, this sunscreen formulation shields the skin against harmful UV rays and environmental stressors. Perfect under makeup or on its own, it's a ticket to flawless, red carpetready skin.



**NovaColl<sup>™</sup>:** A micro-molecular, vegan and 100% skin-identical collagen produced through precision fermentation. Enhances skin penetration, improves barrier integrity and reverses visible signs of aging. It has a low carbon footprint.

**CosVivet SQ 94:** Emollient, produces a very soft, silky feeling and is easily absorbed without leaving white or greasy residue.

**SunCat JCW03PF:** Encapsulated UV sunscreen, photostable and non-irritating to skin with high sun protection at low use levels.

**CosVivet HA FILM:** Very high molecular weight sodium hyaluronate, forms a protective film on the skin, prevents water evaporation in deeper skin layers, strengthens the hydrolipidic barrier.

**STEPAN MILD® L3-G/MB:** Emollient, emulsifier and viscosity builder for a light, fluid feel with a satin finish.

**STEPAN-MILD® GCC/FL MB:** 100% bio-based emollient ester with texturizing and viscosity building properties which acts as a preservative booster.



#### Star shield sunscreen 4-in-1

Phase	Trade Name	INCI	% W/W	Supplier	Function
А	Deionized water	Aqua (Water)	59.00		Diluent
	Xanthan Gum*	Xanthan Gum	0.60	Brenntag	Thickener
	Glycerin*	Glycerin	2.00	Brenntag	Humectant
В	CosVivet SQ 94*	Squalane	3.00	Brenntag	Active
	STEPAN-MILD® GCC/FL MB*	Glyceryl Caprylate/Caprate, Glycerin, Propanediol	3.20	Stepan	Emollient
	Glyceryl Stearate*	Glyceryl Stearate	3.50	Brenntag	Emulsifier
	CosVivet PA CS 50/50*	Cetearyl Alcohol	3.00	Brenntag	Emulsifier
	STEPAN MILD® L3-G/MB*	Lauryl Lactyl Lactate	3.00	Stepan	Emollient
	Coco Caprylate/Caprate*	Coco Caprylate/Caprate	4.00	Brenntag	Emollient
С	SunCat JCW03PF*	Aqua, C12-15 Alkyl Benzoate, Diethylamino Hydroxybenzoyl Hexyl Benzoate, Ethylhexyl Triazone, Bis- Ethylhexyloxyphenol Methoxyphenyl Triazine, Propanediol, Hydroxyacetophenone, Lecithin	15.00	Bio-Nest	UV Filter
	NovaColl™*	sh-Polypeptide-47	2.00	Cambrium	Active
	CosVivet HA FILM*	Sodium Hyaluronate	0.30	Brenntag	Active
	Aquaguard NK12*	Sodium Benzoate, Potassium Sorbate, Aqua	1.00	ISCA	Preservative
	Parfum	Parfum (Fragrance)	0.40	On request	Fragrance

\*Available from Brenntag

### **Procedure:**

- 1. Pre-mix xanthan gum and glycerin and add it to the water.
- 2. Heat phase A to 60°C.
- 3. Prepare phase B and heat to 60°C.
- 4. Add phase B to phase A at 2000 rpm for 10 min.
- 5. Reduce speed to 650 rpm and cool down temperature to 45°C then add phase C to A+B.

# **Properties:**

Appearance: Yellow cream

pH-value: 5.0-5.5

Viscosity (Brookfield serises, RVT, M05, 10rpm) @23°C:

7500 cP

### Stability:

Stable 1 month at  $50^{\circ}$ C at  $4^{\circ}$ C,  $40^{\circ}$ C and  $25^{\circ}$ C. Stability over 3 months at  $4^{\circ}$ C,  $40^{\circ}$ C and  $25^{\circ}$ C is ongoing.

## Natural Index (according to ISO 16128):

cNO: 88.50%

# Trends

**Sustainability:** high natural content, low carbon footprint, includes upcycled and

ethically sourced squalane

Multifunctional: functions as a day cream with SPF and has anti-aging properties Preventative skin care: collagen banking Skintelligence: formulation features AI-

designed NovaColl™SK

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