

BEMT Sunscreen Lotion

13217-2



This elegant cream sunscreen is designed for daily wear, delivering high SPF potential with a lightweight feel and no greasy residue. Pemulen™ TR 2 and Bentone Hydroluxe™ 360 form a robust yet flexible emulsification system, balancing structure and rapid absorption for a smooth, refined skin feel.

Broad spectrum protection is driven by a chemical sunscreen package featuring Parsol® Shield (BEMT), newly approved for the U.S. market and well known for enabling high SPF formulations. Schercemol™ DIA plays a dual role—efficiently solubilizing BEMT while contributing a dry, non greasy sensory that enhances everyday wearability.

Sensory performance is further elevated with Harmonie™ Natuvel Gel, selected to reduce oiliness while adding cushion, slip, and a soft, silky afterfeel. Structure® XL reinforces high temperature stability and helps maintain viscosity during processing, while Solamaze™ Natural acts as the film former, supporting water resistance and improved rub off performance.

Together, this material driven system delivers reliable sun protection with a modern, consumer preferred aesthetic ideal for premium facial and body sunscreen applications.

INCI	TRADE NAME	FUNCTION	SUPPLIER	%
PHASE A				
Water		Vehicle		57.70
Betaine	GENENCARE® OSMS BA	Osmolyte	IFF	2.00
Propanediol	Zemea® Propanediol	Humectant	Primient	2.00
Hydroxypropyl Starch Phosphate	Structure® XL	Rheology Modifier	Nouryon	1.25
PHASE B				
Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	Parsol® Shield	UV Filter	DSM	5.00
Ethylhexyl Salicylate	Parsol® EHS	UV Filter	DSM	5.00
Octocrylene	Parsol® 340	UV Filter	DSM	3.00
Diisopropyl Adipate	Schercemol™ DIA	Ester/Solubilizer	Lubrizol	12.00

Coco-Caprylate/Caprato (and) Polyglyceryl-2 Isostearate/Dimer Dilinoleate Copolymer (and) Squalane	Harmonie™ NatuVel Gel	Structuring Agent	Momentive	5.00
Glyceryl Stearate Citrate (and) Cetearyl Alcohol (and) Hectorite (and) Xanthan Gum (and) Glyceryl Behenate	Bentone Hydroluxe™ 360	Emulsifier	Elementis	1.50
Diisostearoyl Polyglyceryl-3 Dimer Dilinoleate (and) Caprylic/Capric Triglyceride	Solamaze™ Natural	Film Former	Nouryon	3.30
Trilaureth-4 Phosphate	Hostaphat® KL 340	Emulsifier	Clariant	0.75
Acrylates/C10-30 Alkyl Acrylate Crosspolymer	Pemulen™ TR-2	Emulsifier	Lubrizol	0.30
PHASE C				
Water (and) Sodium Hydroxide	NaOH 25%	Neutralizer	Essential Ingredients	0.30
Phenoxyethanol (and) Ethylhexylglycerin	Esept PE 9010	Preservative	Essential Ingredients	0.90
TOTAL				100%



Mixing Instructions

- Add the Phase A components to the main one at a time, mixing thoroughly after each addition. Heat up to ~80°C
- In a separate vessel, combine the UV filters and Schercemol DIA and heat to ~80°C while mixing. It's important to ensure the BEMT is fully solubilized before adding the remaining ingredients. Once uniform and clear continue to add the remaining Phase B ingredients one at a time mixing until uniform while continuing to heat up to temp ~80°C.
- Once both phases have reached a temperature of approximately 80°C, transfer B to A, mixing at temp for 10 mins then begin to cool.
- @ 60°C add Phase C ingredients one at a time and mix thoroughly after each addition.
- Mix until room temperature.

Appearance: White to off-white/slightly yellow cream **pH:** 7.06
Viscosity: 86,000 (RV#7 @ 10rpm) **SPF:** 50 Expected based on comparative In-Vitro Testing