



## **AQUA BARRIER SUN MILK** (SPF 50 Expected)

High protection Light and soft texture Category - Sun Care

## AQUA BARRIER SUN MILK (SPF 50 EXPECTED) - TECHNICAL APPLICATION SHEET Formulation n° EW2002101

MANUFACTURING PROCESS	INGREDIENTS	INCI / CHEMISTRY	FUNCTION	WEIGHT %
Phase 1 Mix the ingredients and heat up to 80°C while stirring.	ERCAWAX CE V - ErcaWilmar	Glyceryl Stearate Citrate	O/W Emulsifier	2,00
	ERCAGREEN 3S - ErcaWilmar	Polyglyceryl-3 Stearate	O/W Emulsifier	1,00
	ERCANOL CS 30/70 V - ErcaWilmar	Cetearyl Alcohol	Giving Factor	1,00
	ERCAREL AB - ErcaWilmar	C12-15 Alkyl Benzoate	Emollient	10,00
	ERCAREL DCA V - ErcaWilmar	Dicapryl Adipate	Emollient	4,00
	ERCAREL TCC V - ErcaWilmar	Caprylic/Capric Triglyceride	Emollient	3,00
	ERCAREL PGDD V - ErcaWilmar	Propylene Glycol Dicaprylate/Dicaprate	Emollient	4,00
	Ethylhexyl Salicylate	Ethylhexyl Salicylate	UVB Absorber	5,00
	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	UV Absorber	5,00
	Butyl Methoxydibenzoylmethane	Butyl Methoxydibenzoylmethane	UVA Absorber	4,00
	Ethylhexyl Triazone	Ethylhexyl Triazone	UVB Absorber	3,00
	Tocopheryl Acetate	Tocopheryl Acetate	Antioxidant	0,50
Phase 2	Water, Demin.	Aqua	Solvent	q.b. to 100
Mix the ingredients and heat up to 80°C while stirring.	Pentylene Glycol, Phenylpropanol	Pentylene Glycol, Phenylpropanol	Moisturizing Agent	3,00
Add Phase 1 to Phase 2 while stirring with high agitation (900 - 1000 rpm) for emulsifying. Cool down to room temperature while stirring.	Sodium Phytate, Aqua, Alcohol	Sodium Phytate, Aqua, Alcohol	Chelating Agent	0,10
	Lysolecithin, Sclerotium Gum, Xanthan Gum, Pullulan	Lysolecithin, Sclerotium Gum, Xanthan Gum, Pullulan	Gelling-Emulsifying Agent	0,50
	Titanium Dioxide, Silica	Titanium Dioxide, Silica	UV Protection Agent	7,00
Phase 3  Add the ingredients step by step to Phase 1+2 with slow agitation.	ERCAFIL PU 35 - ErcaWilmar	Polyurethane-35	Film Forming Agent	5,00
	Aqua, Glycerin, Polygonum Aviculare Extract	Aqua, Glycerin, Polygonum Aviculare Extract	Anti-Photoaging Agent	2,00
	Fragrance - Expressions Parfumées	Parfum	Fragrance	0,20
Phase 4  Add the preservative system under stirring and adjust the pH to 5,0 - 6,0.	Preservative System	Preservative System	Preservative System	q.b.
	Lactic Acid	Lactic Acid	Buffering	q.b.

## PRODUCT SPECIFICATIONS

Appearance: Milk - pH: 5,0 - 6,0 - Viscosity (Brookfield DV-E, 20°C): 2,000 - 4,000 mPa.s Not microbiologically tested

## HOW ERCA-WILMAR INGREDIENTS ADD VALUE TO THIS FORMULATION:

ERCAFIL PU 35 (Polyurethane-35): polymer with film forming functions used in Skin Care, Sun Care and color cosmetics. It also gives a natural and soft touch as weel as water and sweat resistant properties to formulations. Is expecially used in long wear mascara and eye-liners

ERCAGREEN 3S (Polyglyceryl-3 Stearate): polyglyceryl ester used as a non ionic O/W emulsifier derived from natural sources. Recommanded in PEG-free formulations.

ERCAWAX CE (Glyceryl Stearate Citrate): extremely versatile PEG-free emulsifier for making O/W emulsions. Imparts consistency and oil binding capacity and also works as co-emulsifier for PEGfree sensitive skin formulations providing a soft and cushiony skin feel.

ERCAREL DCA (Dicapryl Adipate): multifunctional light emollient non-occlusive, non-oily, with excellent spreading properties. It functions as a non-oily emollient lubricant and it is perfect for Sun Care and After Sun formulations.

 $\textbf{ERCAREL PGDD} \ (Propylene \ Glycol \ Dicaprylate/Dicaprate): emollient \ ester \ that \ leaves \ a \ light,$ non-oily, smooth and velvet skin sensation similar to low molecular weight silicon oils.

**ERCAREL TCC** (Caprylic/Capric Triglyceride): emollient with solvent properties, excellent stability, and moisturizing and conditioning properties. It also enhances emulsion stability and is stable against oxidation. It exhibit excellent skin smoothing properties with a good dermatological compatibility and good solubility for liposoluble additives. In this formula it helps restore skin hydrolipidic film.

ERCANOL CS 30/70 (Cetearyl Alcohol): composed of cetyl alcohol and stearyl alcohol of natural, non-animal origin. It has consistency giving characteristics. In this formulation ERCANOL CS 30/70 functions as an emollient, emulsion stabiliser, viscosity and structure modifier. It gives a pleasant soft skin feel to the cream.

ERCAREL AB (C12-15 Alkyl Benzoate): this multifunctional emollient acts as a wetting and dispersing agent, is highly spreadable and provides a very light touch. It confers a dry, talclike feel, is extremely mild to skin and eyes, spreads easily and is a valuable solvent for sun-

Disclaimer: The information presented herein describe how our products can be used. The given data, claims and procedures, are suggestions without any guarantee, aimed at supporting customers' development. Any product manufactured corresponding to the present recipe is used at own risk and may require additional testing prior to marketing in order to comply with local regulations. Unless supplied by Erca-Wilmar, we refuse any responsibility for the availability, the quality and the safety of the raw materials employed in the present formulation. As production conditions at our customers' facilities are beyond our control, we also refuse to accept any liability involved in the use of our products. Please observe possible third party patent rights.