

# Sun Care Oil Gel SPF 30

UV-DE-23-NB-4385560-002



## Main Claims:

- Innovative format for oil-gel.
- Alternative oil thickening system.
- Alternative to silicone elastomers.
- Invisible once applied on the skin.
- Suitable for EcoSun Pass<sup>®</sup> certified.

## Market trend:

**+100%** growth in sun care products claiming to be invisible

2021 vs 2023\*



# BTC

Chemical Distribution

## Cetiol<sup>®</sup> ABV

It is a medium spreading emollient with good solubilizing properties for crystalline UV-filters.

## Uvinul<sup>®</sup> T 150

The most powerful UV-B filter. Highest photo-stable absorption of all available UV-B filters. High efficiency even at low UV-filter concentration. Suitable for perfume-free formulations.

## Uvinul<sup>®</sup> A Plus

The only photostable UV-A filter on the market for reliable and long-lasting protection. Efficient shielding against UVA radiation, easy achievement of EU recommendation (UVA-PF/SPF  $\geq 1/3$ ).

## Cetiol<sup>®</sup> Ultimate

Volatile, ultra fast-spreading and dry emollient; a 100% renewable-based alternative to Cyclomethicone. Ultra light hydrocarbon emollient, provides a silicone oil-like, powdery and waxy-dry skin feel.

**Achieve effortless daily sun protection with an invisible and easy-to-apply SPF 30 formula that seamlessly blends into the skin**

A brand of BASF – We create chemistry

\*GNPD. Mintel search of gel sun care products claiming invisible world wide. 2024

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Chemical Distribution

## UV-DE-23-NB-4385560-002

Phase	Ingredients	INCI	% by weight	Function
A	<b>Cetiol® ABV</b>	C12-15 Alkyl Benzoate	15.00	Emollient
	Cetiol® CC	Dicaprylyl Carbonate	18.00	Emollient
	Cetiol® B	Dibutyl Adipate	10.00	Emollient
	Xiameter OMX-200 Silicone Fluid 10 cst	Dimethicone	9.50	Skin feel modifier
	<b>Uvinul® T 150</b>	Ethylhexyl Triazone	3.50	UV-B filter
	<b>Uvinul® A Plus</b>	Diethylamino Hydroxybenzoyl Hexyl Benzoate	4.50	UV-A filter
	Tinosorb® S	Bis-Ethylhexyloxyphenol Methoxyphenyl	4.50	Broad spectrum UV filter
B	<b>Cetiol® Ultimate</b>	Undecane, Tridecane	14.80	Emollient
	Perfume*	Parfum	0.20	Fragrance
C	Plantacare® 1200 UP	Lauryl Glucoside	2.00	Surfactant
	Glycerin	Glycerin	16.00	Stabilizer
	Citric Acid (50% solution)	Citric Acid	1.50	pH Adjustment
	Sodium Benzoate	Sodium Benzoate	0.50	Preservative

## Manufacturing Process

1. Premix phase A and heat up to 85°C. 2. Premix phase C and heat up to 85°C. 3. Start dispersing phase C at 85°C. Add phase A to phase C slowly while dispersing. Add phase B to phase A+C after reaching a temperature of 70°C. 4. Disperse the builded gel till 45°C and homogenize after that for 30 seconds. 5. Fill the gel into suitable packaging at 35°C. 6. Directly after preparation shows the formulation a peak viscosity of 38.00mpas, which will reduce afterwards to stable 18.00 mpas.

\*Düllberg Coconut Water & Coriander Leaf



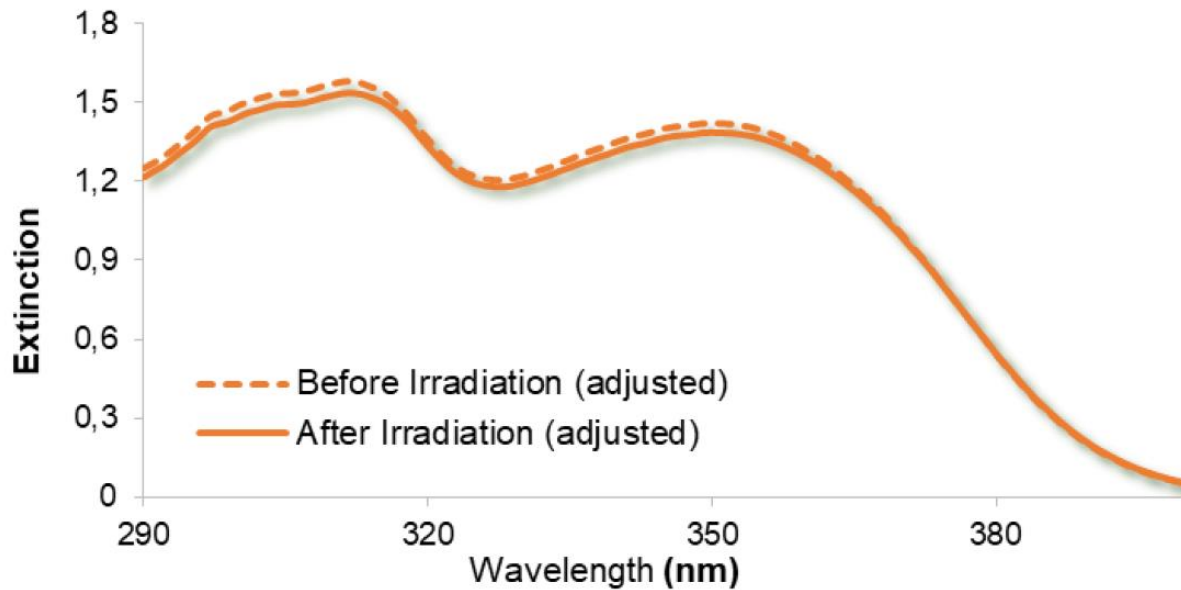
## Specifications

Aspect	Yellowish oil-gel
pH value (23°C)	4.5 – 4.9
Viscosity (Brookfield; RVT; spindle TE; Helipath; 4 rpm; 23°C)	18.000 mPa s

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## Performance



1. BASF Sunscreen Simulator - in silico determination of the sun protection factor. 2. BASF internal method Nr. 55 - determination of the in vitro SPF & UVA Protection Factor (UVA-PF) 3. Environmental Evaluation of Sunscreen Products

## Filter combinations

4.5% Uvinul® A Plus  
3.5% Uvinul® T 150  
4.5% Tinosorb® S

SPF in silico <sup>1</sup>	30.1
UVA-PF in vitro <sup>2</sup>	10.4
UVA-PF / SPF	>1/3 
EcoSun Pass <sup>3</sup>	201
Natural Origin Content accord. to ISO 16128	59



- Fully photostable UV protection.
- UVA protection fulfilling EU requirements