

# Invisible Radiant Shield SPF50

2578-1.16



+

Day care

+

Light texture

+

Mineral + Chemical UV filters

Phase	Name	INCI	Supplier	%
A1	DEMINERALIZED WATER	WATER	-	34.90
	CARBOPOL® AQUA SF-1 OS POLYMER	WATER, ACRYLATES COPOLYMER	LUBRIZOL	3.50
A2	BUTYLENE GLYCOL	BUTYLENE GLYCOL	-	3.00
	SATIAXANE™ VPC 911	XANTHAN GUM	CARGILL	0.30
A3	SODIUM HYDROXIDE (10 % SOL.)	WATER, SODIUM HYDROXIDE	-	0.50
A4	HYDRAMOL™ TGL	POLYGLYCERYL-3 LAURATE	LUBRIZOL	1.00
A5	DISODIUM EDTA	DISODIUM EDTA	-	0.10
A6	PARSOL® HS	PHENYLBENZIMIDAZOLE SULFONIC ACID	DSM	3.00
	DEMINERALIZED WATER	WATER	-	3.00
	SODIUM HYDROXIDE (10 % SOL.)	WATER, SODIUM HYDROXIDE	-	5.25
B1	TINOGARD TL	BENZOTRIAZOLYL DODECYL P-CRESOL	BASF	0.50
	UVINUL® A PLUS	DIETHYLAMINO HYDROXYBENZOYL HEXYL BENZOATE	BASF	2.00
	TINOSORB® S	BIS-ETHYLHEXYLOXYPHENOL METHOXYPHENYL TRIAZINE	BASF	2.50
	PARSOL® EHS	ETHYLHEXYL SALICYLATE	DSM	5.00
	C12-15 ALKYL BENZOATE	C12-15 ALKYL BENZOATE	-	9.00
	PRESERVATIVE	PRESERVATIVE	-	0.70
	PARSOL® 1789	BUTYL METHOXYDIBENZOYLMETHANE	DSM	3.00
	<b>DPPG CG</b>	PROPYLENE GLYCOL DIPELARGONATE	GATTEFOSSE	<b>3.50</b>
B2	<b>EMULIUM® DERMOLEA MB</b>	POLYGLYCERYL-6 DISTEARATE, CANDELILLA/JOJOBA/RICE BRAN POLYGLYCERYL-3 ESTERS	GATTEFOSSE	<b>4.00</b>
B3	TXD60-AB	TITANIUM DIOXIDE, C12-15 ALKYL BENZOATE, POLYHYDROXYSTEARIC ACID, SILICA, DIMETHICONE	SUNJIN BEAUTY SCIENCE	8.00
C	<b>GATULINE® RADIANCE</b>	PROPANEDIOL, EVODIA RUTAECARPA FRUIT EXTRACT	GATTEFOSSE	<b>2.00</b>
	<b>GATULINE® RC BIO</b>	WATER, FAGUS SYLVATICA BUD EXTRACT	GATTEFOSSE	<b>2.00</b>
	MIRAGE BRIGHT RED	CALCIUM SODIUM BOROSILICATE, TITANIUM DIOXIDE, TIN OXIDE	ECKART	0.80
	UNICERT YELLOW 08005-J (1.0% SOL.)	WATER, YELLOW 5	SENSIENT	0.06
	UNICERT RED 07004 J (1.0% SOL.)	WATER, RED 4	SENSIENT	0.06
	CORN P04 PH B 9042	DISTARCH PHOSPHATE	AGRANA	2.00
PERFUME ARGANORANGER MIEL RS35850	PARFUM	TECHNICO-FLOR	0.20	
D	SODIUM HYDROXIDE (10 % SOL.)	WATER, SODIUM HYDROXIDE	-	0.13
				100

## Operating instructions

- Mix A1.
- Premix A2, add to A1 and stir until complete dispersion of xanthan gum. Then heat at 60°C and add A3.
- Add A4 under high shear (Ultra Turrax is possible to make sure there are no lumps of gel), then add A5 and stir until complete solubilization of EDTA.
- Mix A6 until complete solubilization of Parsol® HS and then add to batch.
- Heat B1 at 80°C until complete solubilization of UV filters, then let it cool to 60°C and add B2, stir until complete solubilization then add B3 and homogenize.
- Add slowly B (60°C) into A (60°C) under mixing and homogeneize for 15min at 2000rpm.
- Cool down to 35°C under moderate mixing (about 800rpm) and add premix C under stirring.
- Add D to adjust final pH at 7.2 and stir for 10min. If needed to have a thinner emulsion, adding 1min of high shear is possible.

This formula is presented in good faith, however, no warranty as to the accuracy or completeness of results, or fitness for a particular use is given, nor is freedom from the infringement of any intellectual/industrial property rights to be inferred. It is provided "as is" for your consideration, investigation and verification. To the extent permissible by applicable law, Gattefossé shall in no way be liable for any reliance upon information or materials provided.



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### Description

Skin is radiant and moisturized with this highly protective sunscreen that contains **Gatuline® RC Bio** and **Gatuline® Radiance**, two clinically evaluated actives. The emulsifier, **Emulium® Dermolea MB**, provides ideal lightness upon application, despite the high UV protection, and is perfect for sensitive skin.

### Specifications

- + Aspect: Glossy and slightly peach cream
- + pH:  $7.2 \pm 0.3$
- + Viscosity Brookfield RV (spindle A, speed 5): approx.  $14000 \pm 2000$  mPa.s after 24h
- + Photostability 92%
- + Conform to Australian, EU, Japan, UK, MERCOSUR, and China regulations
- + SPF *in vivo* (ISO 24444:2010): 53.6\* (4 vol.)
- + UVA *in vitro* (ISO 24443:2021): 29.7\*
- + \* Tests conducted on a similar formula (1704-1.23). *In vitro* measurement highlights same absorbance curve.

### Ingredients

- **Emulium® Dermolea MB** is a 100% natural origin O/W emulsifier which supports the skin barrier function. It is used at 4% in this formula to emulsify the oil phase containing UV filters and solubilizers.
- Carbopol® Aqua SF-1 OS polymer is an acrylate gelling agent that has a good compatibility with TiO<sub>2</sub>.
- Hydramol™ TGL helps to keep TiO<sub>2</sub> well dispersed over time.
- Uvinul® A Plus and Parsol® 1789 are organic lipophilic UVA filters.
- Parsol® EHS and Uvinul® T 150 are organic lipophilic UVB filters.
- Parsol® HS is an organic hydrophilic UVB filter that needs pH adjustment.
- Tinosorb® S is a broad spectrum organic UV filter that improves the photostability of Parsol® 1789.
- **DPPG CG** and C12-15 Alkyl Benzoate are emollients that help to solubilize UV filters.
- TXD60-AB is a dispersion of 46% Titanium Dioxide in C12-15 Alkyl Benzoate.
- **Gatuline® Radiance** enhances all aspects of a radiant complexion, including skin color, brightness and luminosity.
- **Gatuline® RC Bio** increases skin hydration and minimizes fine lines for a healthier and younger look.