



**SUN#BEACH#SPF50+ — CPF 4300**  
Oil-in-Water Sun Cream

At the present time, this prototype formulation is not approved against regulatory requirements that permit compliant use in North America, and therefore not available for sale in the North America Region.

# SUN#BEACH#SPF50+ – CPF 4300

Oil-in-Water Sun Cream

Phase	Trade name / Supplier	INCI name	Wt %
A	Water	Water	52.90
	SunSpheres™ BIO SPF Booster / Dow	Microcrystalline Cellulose	2.00
	Zemea / DuPont	1,3-Propanediol	2.25
	VERSENE™ NA <sub>2</sub> Crystals / Dow	Disodium EDTA	0.10
	ACULYN™ 38 Rheology Modifier / Dow	Acrylates / Vinyl Neodecanoate Crosspolymer	2.00
B	Neo Heliopan HMS / Symrise	Homosalate	5.00
	Neo Heliopan 357 / Symrise	Butyl Methoxydibenzoylmethane	4.00
	Tinosorb S / BASF	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	3.00
	Neo Heliopan OS / Symrise	Ethylhexyl Salicylate	4.00
	Uvinul T 150 / BASF	Ethylhexyl Triazone	2.00
	Crodamol AB / Croda	C12-15 Alkyl Benzoate	9.00
	Cetiol B / BASF	Dibutyl Adipate	2.25
C	XIAMETER™ PMX-200 Silicone Fluid, 2 cSt / Dow	Dimethicone	2.00
	DOWSIL™ FZ-3196 Fluid / Dow	Caprylyl Methicone	2.00
	Cutina GMS-SE / BASF	Glyceryl Stearate SE	4.00
C	Sodium Hydroxide, 10% sol.	Sodium Hydroxide	qs
D	EPITEX™ 99 Polymer / Dow	Acrylates Copolymer (and) Acrylates/ Polytrimethylsiloxymethacrylate Copolymer	2.50
E	Neolone PH 100 Preservative / DuPont	Phenoxyethanol	1.00

## Processing instructions:

1. Disperse SunSpheres™ BIO SPF Booster in water and mix until dispersed/no clumps (~20 minutes). While mixing, add the phase A ingredients in order listed until homogeneous, then start heating to 75°C.
2. Mix sunscreen ingredients of phase B together and start heating to 80-85°C for 5-10 minutes then add remainder of phase B ingredients one by one. Mix at 70-75°C until all ingredients are melted/dissolved.
3. Add phase B to phase A mixing moderate speed until uniform.
4. Add phase C ingredient if needed (pH target 6,5-7) and start cooling.
5. When T° <40°C, add phase D, then E and mix well (for 2 min at 2000 rpm).
6. Adjust pH to 6,5-7 if needed.

**Stability:** Stable at least 2 months at RT and at least 1 month at 40°C.

**Appearance:** Slightly yellow cream

**Viscosity:** 20.000 cSt

**pH:** 6,0-7,0

**Disclaimer:** Contained in this package is a sample prepared as per the formulation described on this card. Any variation in the formulation/procedure may cause performance to change.

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Form No. 27-2733-01-1221 S2D