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_2 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
	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 70-75ºC 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.

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.

Image: dow_59149368401

2000015362

Form No. 27-2733-01-1221 S2D