



CELLULOSE NANOFIBERS & NANOCRYSTALS

FOR COSMETIC APPLICATIONS

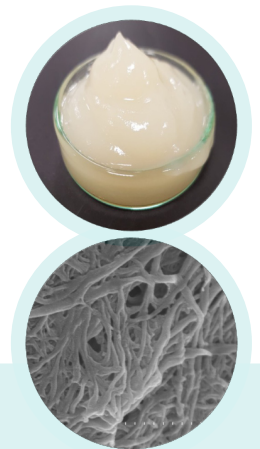
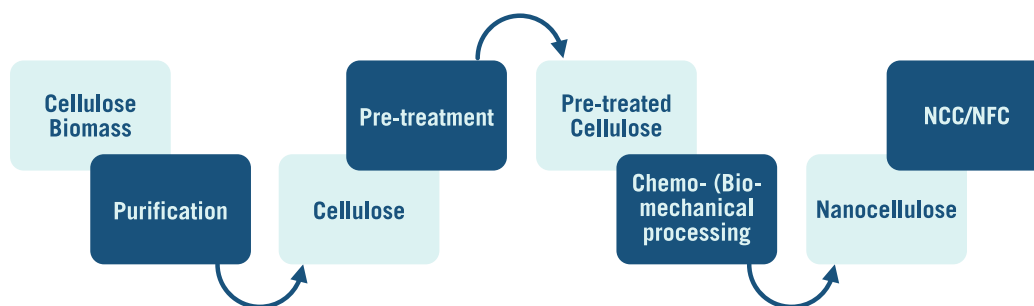
- ✓ HIGH WATER RETENTION
- ✓ REMARKABLE TEXTURE
- ✓ THICKENING AGENT
- ✓ FILM-FORMING
- ✓ EMULSION STABILIZING
- ✓ SUSTAINABLE MATERIAL
- ✓ BIODEGRADABLE



APPLICATIONS

- Replacing fossil-based additives as rheological modifier and stabilizer
- SPF booster in sunscreen emulsions
- Functional ingredient in products for hyperhidrosis or to treat underarm sweating in deodorant formulations

CNF PRODUCTION PROCESS



CONTACT INFORMATION

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SUNSCREEN FORMULATION

	INCI NAME	FUNCTION	%
1	Aqua, CNF (1.3%), Benzyl alcohol, Dehydroacetic acid, Benzoic acid	SPF booster	50-75
2	Coco-caprylate	Emollient	1-5
3	Propanediol	Humectant	1-5
4	Ethylhexyl triazone	UV filter	1-5
5	Bis-ethylhexyloxyphenol methoxyphenyl triazine	UV filter	1-5
6	Diethylamino hydroxybenzoyl hexyl benzoate	UV filter	1-5
7	Dibutyl adipate	Emollient	1-5
8	Cetearyl alcohol, Coco-glucoside	Emulsifier	1-5
9	Benzyl alcohol, Ethylhexylglycerin	Preservative	0,1-1
10	Aqua, Sodium hydroxide	pH regulator	0,1-1
11	Tocophero	Antioxidant	0,1-1
12	Sodium phytate, Aqua, Alcohol	Chelating agent	0,1-1

Phase A: mix the hydrophilic ingredients (1, 3) in a beaker, large enough to contain the whole formula in it, and heat them at 70°C

Phase B: mix the hydrophobic ingredients (2, 4, 5, 6, 7, 8) in a second beaker, and heat them until every component is melted and a homogeneous product is obtained

Phase A+B: pour the phase B into phase A under turbo agitation. Cool down the product to around 40°C and add ingredients 9, 11, and 12 to the formula. Check the pH and add 10 to reach approx. pH 6.

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