

Nissan Chemical,
-where unique & solution meet

WATER COAT 『NANOFIBERGEL[®]』 (NFG[®])

NISSAN CHEMICAL CORPORATION

WATER COAT of NFG is effective in a variety of items.

Nissan Chemical,
-where unique & solution meet

Essence

Moisturizing
&
Active ingredient
penetration enhancer



Cream

Reduce
the stickiness of oil



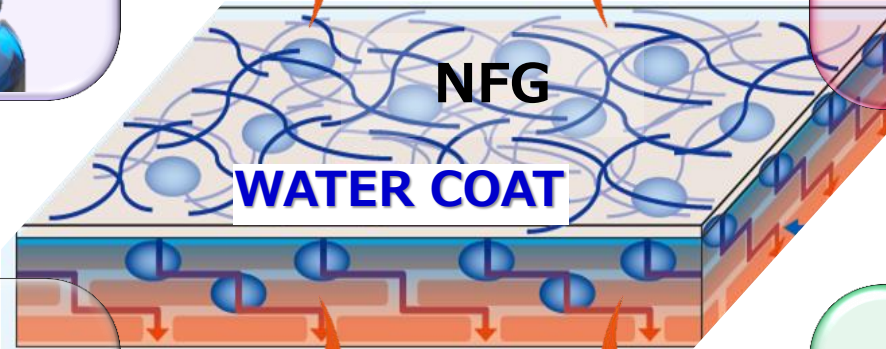
Foundation

Reduce shine
&
Give a matte



Shampoo Treatment

Followed by a moist feeling
by gently coat
the scalp and hair



WATER COAT: Premixes of NANOFIBER GEL

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WATER COAT 『NANOFIBER GEL』 :

In advance we have developed premixes containing a combination of NFG, polyvalent alcohol, and etc as a product.

ES-01

BA-03

OA-03

TW-01W

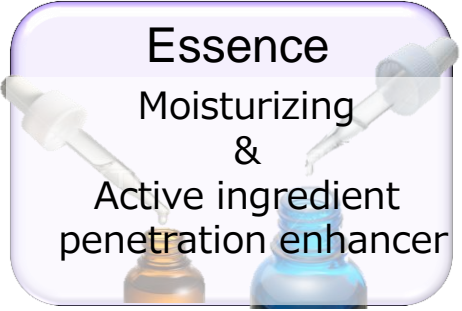
Palmitoyl Dipeptide-18	10.0%	Palmitoyl Dipeptide-18	3.0%	Palmitoyl Dipeptide-18	20.0%	Palmitoyl Dipeptide-18	4.00%
1,2-Hexanediol	1.0%	1,3-Butanediol	0.2%	2-Ethyl-1,3-hexandiol	1.0%	1,3-Butanediol	1.00%
Stearic acid	4.0%	Cetanol	0.2%	Propylene glycole	8.0%	Stearic acid	0.48%
Polyoxyetylen Lauryl ether	8.0%	Myristyl alcohol	1.8%	Stearic acid	16.0%	Sodium hydroxide	40.00%
Water	77.0%	Lauryl hydroxy sulfobetaine	20.0%	Polyoxyetylen Lauryl ether	20.0%	Water	54.52%
		Water	74.8%	Water	35.0%		

	ES-01	BA-03	OA-03	TW-01W
pH of premix	5	5	5	9
Cosmetics	◎	◎	◎	◎
Quasi-drugs	?	In development	In development	In development
Pharmaceuticals	×	×	In development	In development

WATER COAT:

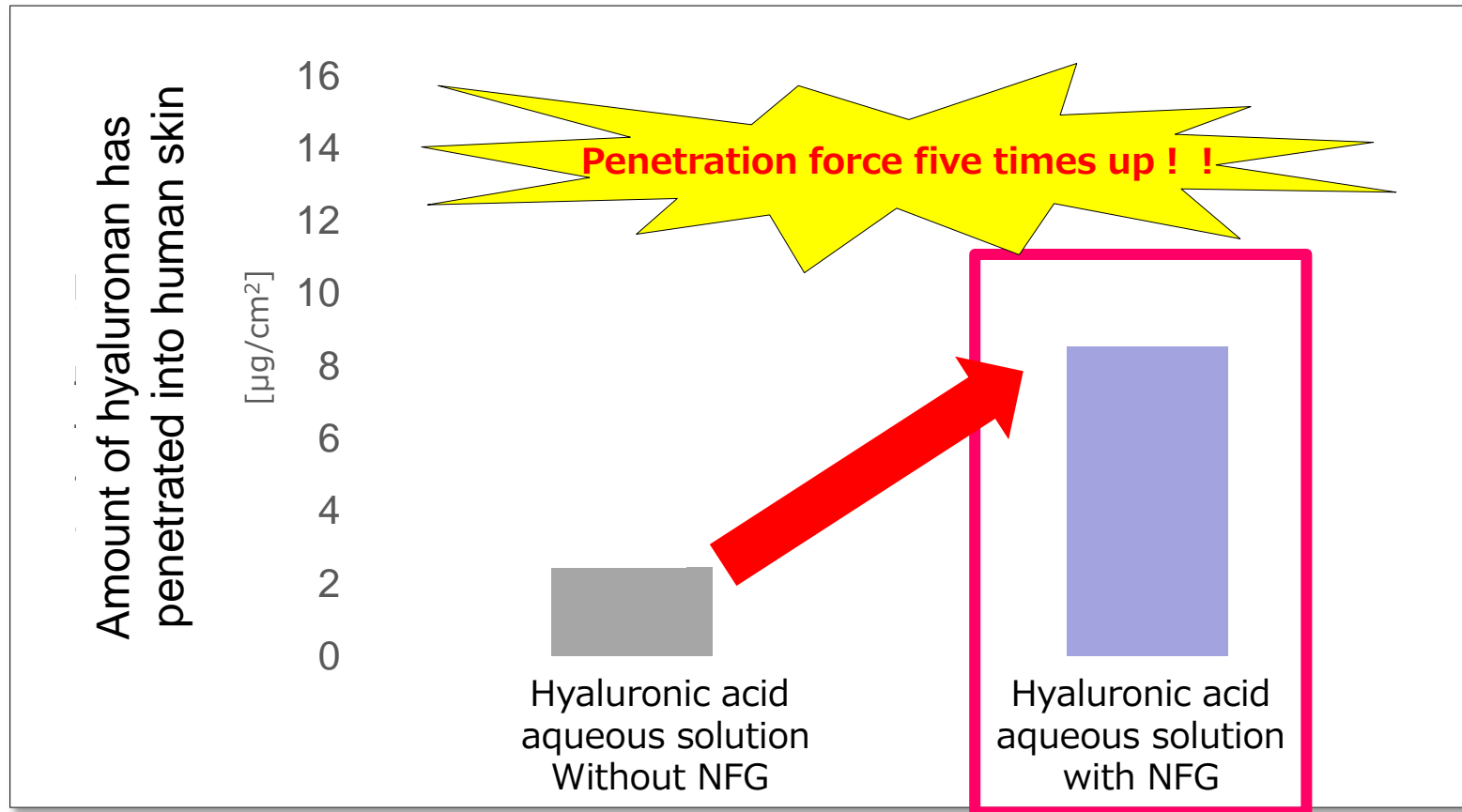
Nissan Chemical,
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Active ingredient penetration enhancer effect



WATER COAT

infiltrates such as hyaluronic acid to the skin



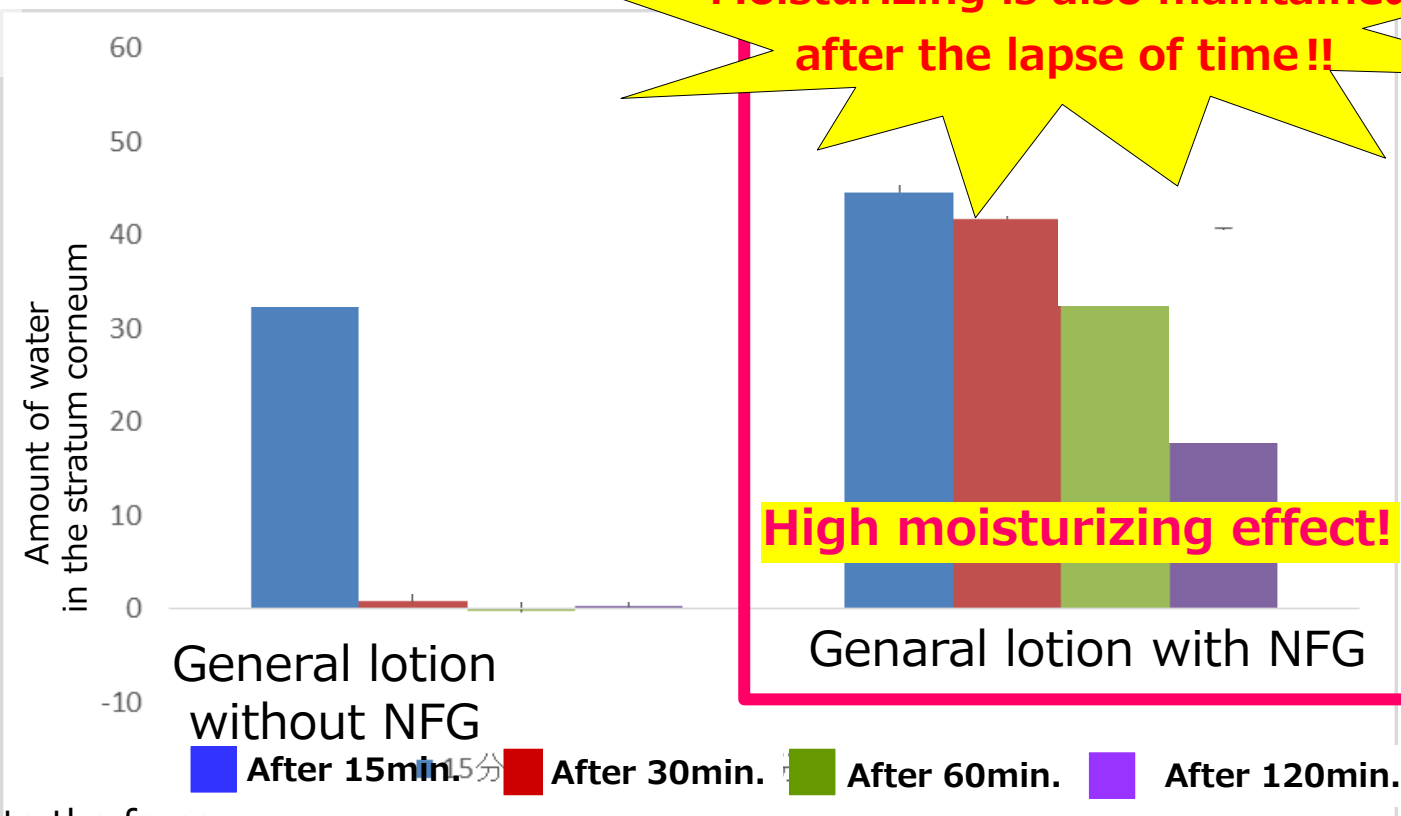
WATER COAT: Moisturizing Effect

Nissan Chemical,
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Essence
Moisturizing
&
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penetration enhancer

WATER COAT coats skin.

And after skin lotion use, It maintains the moisture content of the skin.



Test method :

- ① Place the test sample to the forearm.
- ② After one hour, wash with water without rubbing.
- ③ After washing with water, after 15min, after 30min, after 60min, and after 120min measure the amount of water in the stratum corneum

WATER COAT:

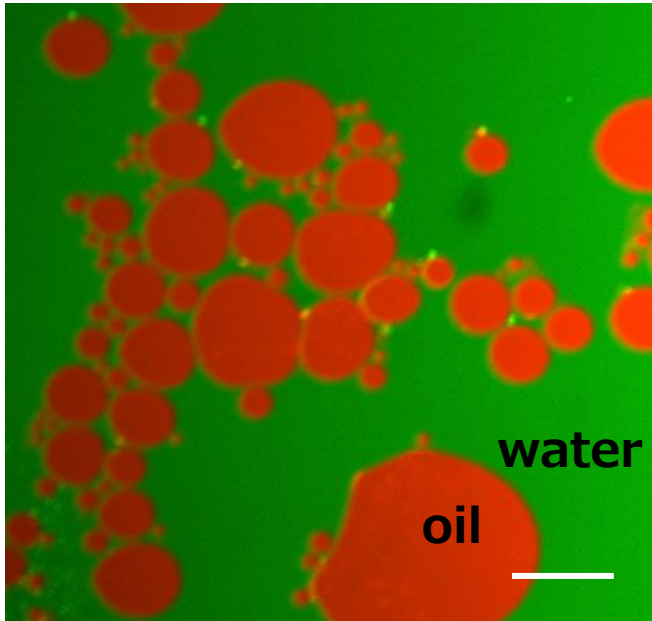
Nissan Chemical,
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It reduces the stickiness of the skin !

Cream

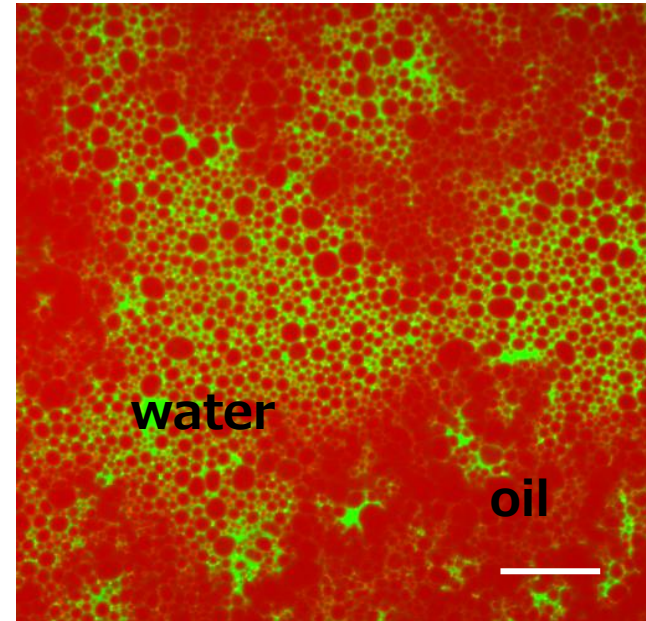
Reduce
the stickiness of oil

WATER COAT coats skin.
It reduces the stickiness by oil



With NFG
20% Jojoba oil + **80%** water

Green : water
Red : Jojoba oil



With NFG
60% Jojoba oil + **40%** water

Even increase the amount of **oil**,
It remains **water** is the continuous phase.

WATER COAT:

It reduces the shine of the skin

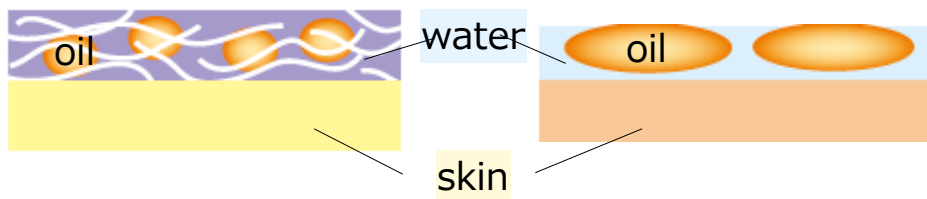
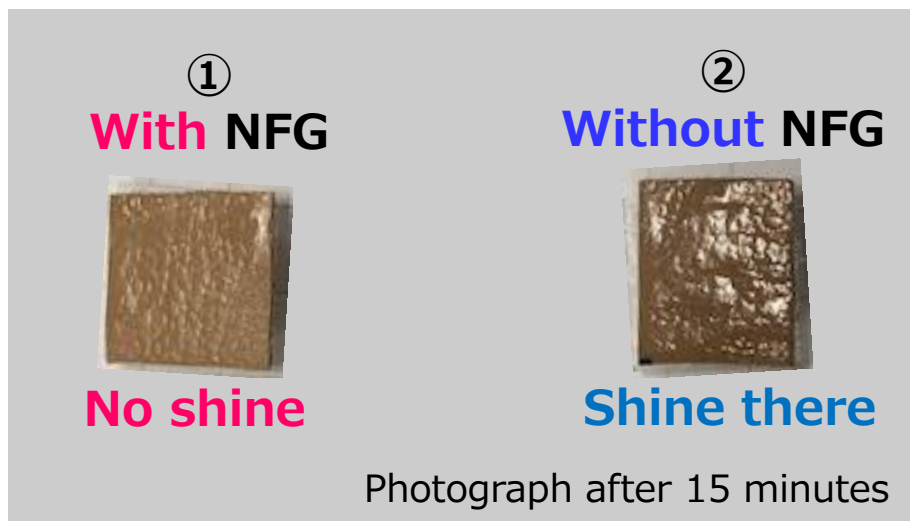
Nissan Chemical,
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Foundation

Reduce shine
&
Give a matte

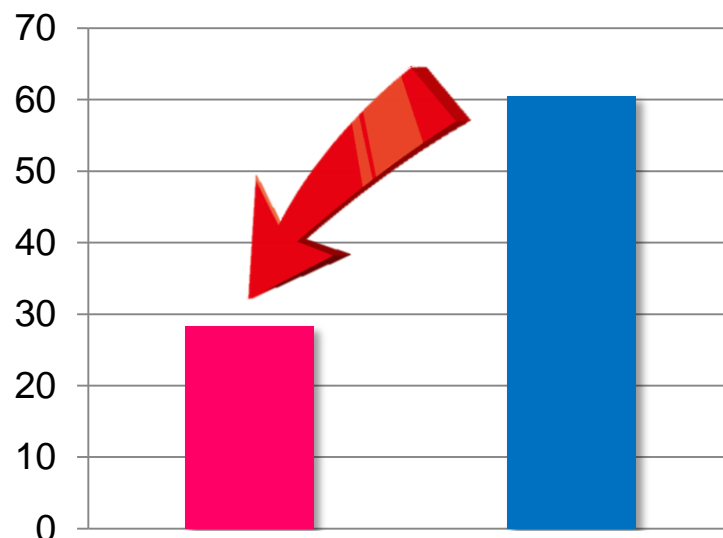
WATER COAT coats skin.

It reduces sticky of oil and the shine of the skin !



Shine 50% cut!
Matte finish!

The reflected light intensity
(a.u.)@45°



① **With NFG** ② **Without NFG**

Measurement data after 15 minutes

WATER COAT:

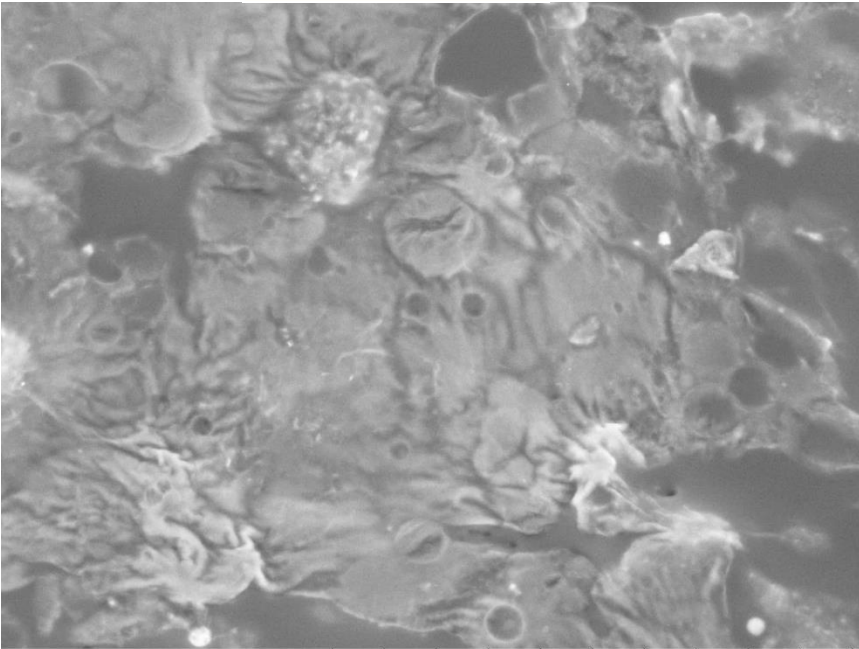
SEM observation of the reflected light sample

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O/W solution
with NFG

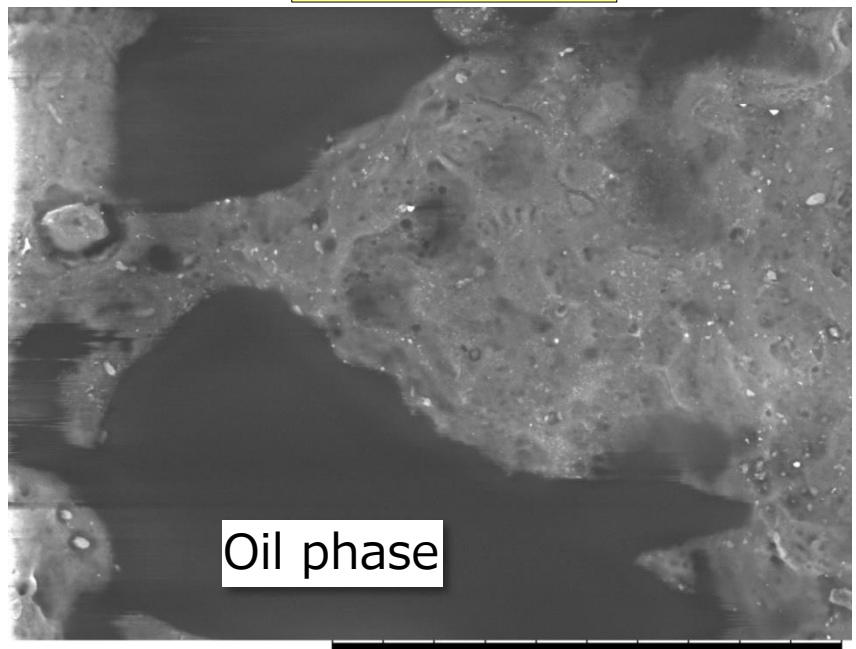
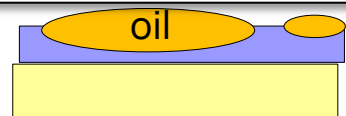
Oil phase is less in the surface layer



Miniscope4730 2017/10/31 18:35 HL D4.7 x500 200 um

O/W solution
without NFG

Often the oil phase in the surface layer.



Oil phase

Miniscope4731 2017/10/31 18:42 HL D4.8 x500 200 um

By oil droplets are embedded in NFG coating, the surface of the oil phase decreases ⇒ Shine to prevention

WATER COAT:

Come together hair better

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Shampoo Treatment

Followed by a moist feeling
by gently coat
the scalp and hair



WATER COAT gently coats the scalp and hair.
Hair of unity will be better after shampooing.

Verification results under the same conditions:
Photos after drying in both dryer

Shampoo		α	β
A			
	Sodium cocoyl glutamic acid	7.30%	7.30%
	Potassium Cocoyl glutamic acid	2.40%	2.40%
	Sodium Cocoyl taurine	4.20%	4.20%
	Cocamidopropylbetain	12.00%	12.00%
	Coconut oil fatty acid diethanolamide	4.00%	4.00%
	1,3-BG	4.00%	4.0ko-0%
	Citric acid	0.35%	0.35%
	water	45.25%	45.75%
B			
	water	20.00%	20.00%
	ES-01	0.50%	0.00%
C			
	Polyoctanium-7	0.50%	0.50%
	total	100.00%	100.00%



Hair washing
by shampoo
with NFG



Hair washing
by shampoo
Without NFG

Effect that can be expected by the NFG addition : NFG+Realize the NFG sample user

Effects on skin care

a) Essence

- ① Skin conditions(moist, smooth) will be better and the better the cosmetic glue

b) UV milk

- ① From the stimulation of UV absorbers and scattering agent, protect the skin, not red

c) cleansig

- ① After washing also, can the film, there is a sense of moisturizing

Effect on the make-up

a) BB cream

- ① By suppressing the floating of sebum, inhibits the shine
- ② It will not collapse makeup
- ③ People of dry skin is no longer dry

Effect of the shampoo

a) Effect on the bubble :

- ① good foaming
- ② fine texture of foam

b) Effect on the hair

- ① Hair is moist
- ② Out the tension and stiffness in hair
- ③ To gently coat the hair and scalp
- ④ Out luster to hair
- ⑤ Hair of unity will be better
- ⑥ It has the better of the color ring。

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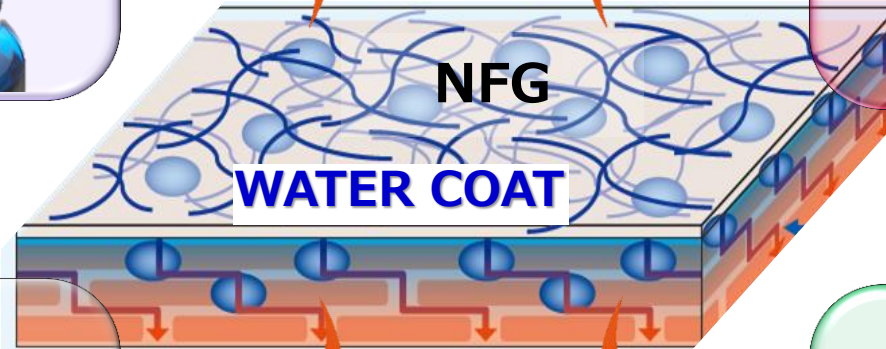
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An inquiry

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