



TREATING
YOU
RIGHT

MiyoSHADE T PLUS

Non-Nano Attenuation Grade TiO₂



- High SPF
- Non-Nano attenuation grade TiO₂
- Easy to disperse
- FDA registered product made at GMP facility
- Globally Compliant

GENERAL INFORMATION

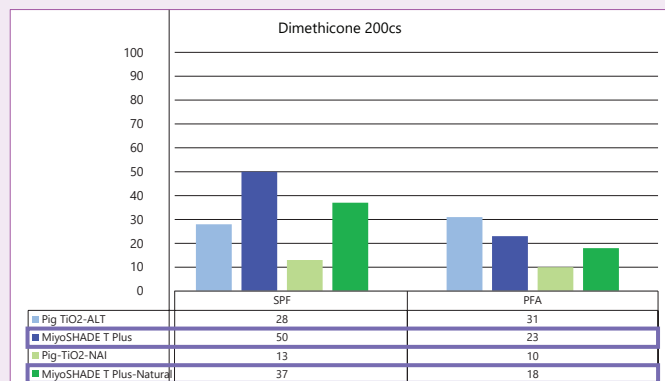
As concerns continue to grow about the health risks (skin penetration and risk of inhalation) and environmental risks (ecotoxicity) of using nano-ingredients in sunscreens, Miyoshi America has launched the MiyoSHADE T Plus lineup; two non-nano attenuation grade Titanium Dioxides. The MiyoSHADE T Plus lineup is globally compliant, easy to disperse, and achieves high SPF values in formulations.

The MiyoSHADE T Plus lineup is available in a silicone-treated Titanium Dioxide, ideal for silicone formulations, as well as a natural, COSMOS approved treated Titanium Dioxide for natural formulations.

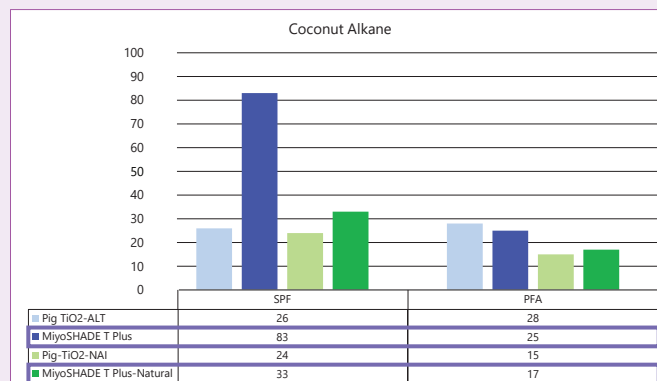
	Base Material	Surface Treatment
MiyoSHADE T Plus	Titanium Dioxide	Triethoxycaprylylsilane
	99%	1%

	Base Material	Surface Treatment
MiyoSHADE T Plus-Natural	Titanium Dioxide	Isostearic Acid
	97%	3%

MiyoSHADE T Plus PERFORMANCE COMPARISON (20% POWDER)

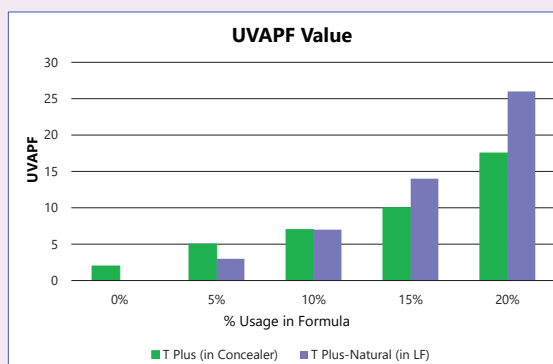
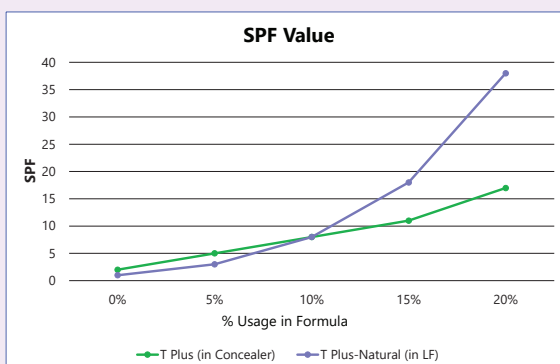


Method: SPF / UVAPF measurement method : Spread 1.3mg/cm² sample on PMMA plate (HD6.) with finger using finger sack. Follow standard measuring procedure for UV-2000 (COLIPA mode)



Method: SPF / UVAPF measurement method : Spread 1.3mg/cm² sample on PMMA plate (HD6.) with finger using finger sack. Follow standard measuring procedure for UV-2000 (COLIPA mode)

IN-VITRO SPF/UVAPF VALUES Vs. PERCENT OF USAGE



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MiyoSHADE T Plus Lineup-LEAF-20220429-Rev.1-E

MiyoSHADE T PLUS

Non-Nano Attenuation Grade TiO2

Cream Concealer w/ SPF 25

USS-0028

A non-nano, Titanium Dioxide, light concealer with excellent coverage and an SPF of 25.



TRADE NAME	INCI NAME	SUPPLIER	%
Lipo® IDD 99A	Isododecane	Vantage	34.50
Risonol 20SP	Octyldodecanol	Miyoshi America	10.20
KF-6038	Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone	Shin-Etsu	3.50
KF-6028	PEG-9 Polydimethylsiloxyethyl Dimethicone	Shin-Etsu	2.00
BENTONE GEL® ISD V	Isododecane (and) Distearidimonium Hectorite (and) Propylene Carbonate	Elementis	8.50
KSG-16	PEG-100 Stearate (and) Glyceryl Stearate	Shin-Etsu	10.00
MiyoSHADE T Plus	Titanium Dioxide (and) Triethoxycaprylylsilane	Miyoshi America	15.00
ALT-YELLOW	Iron Oxides (and) Aluminum Hydroxide (and)Triethoxycaprylylsilane	Miyoshi America	1.12
ALT-RED	Iron Oxides (and) Aluminum Hydroxide (and)Triethoxycaprylylsilane	Miyoshi America	0.44
ALT-BLACK	Iron Oxides (and) Aluminum Hydroxide (and)Triethoxycaprylylsilane	Miyoshi America	0.24
Sericite CS-15	Mica	Miyoshi America	3.00
SA-SB-300	Silica (and) Dimethicone	Miyoshi America	5.00
MiyoFEEL SXI-L	Mica (and) Silica (and) Hydrogenated Lecithin (and) Calcium Chloride	Miyoshi America	5.00
CAB-O-SIL® TS610	Fumed Silica (and) Dimethyldichlorosilane	Cabot Corporation	0.50
Emeressence 1160	Phenoxyethanol	Cognis	1.00
Total			100.00

PROCEDURE:

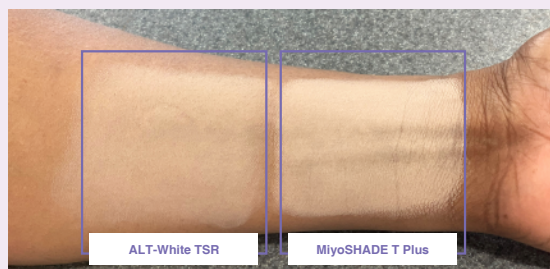
1. Mix phase A with a propeller mixer @ 500 rpm and heat to 65°C.
2. Remove from heat and mix Phase B into Phase A and begin homogenizing at 4500 rpm for 10 minutes.
3. Add Phase C to A and B and continue mixing for 3 to 4 minutes.
4. Cool and package into desired containers.

IN-VIVO SPF:

FDA: 25.3

COLIPA: 23.9

Using 15.00% MiyoSHADE T Plus (Active TiO2 = 14.85%)



MiyoSHADE T Plus (Attenuation Grade) vs. ALT White TSR (Pigmentary Grade)
15.00% TiO2 usage in Liquid Foundation

Cream Foundation w/ SPF 20

USS-0027

A non-nano, Titanium Dioxide, natural liquid foundation with full coverage and an SPF of 20.



TRADE NAME	INCI NAME	SUPPLIER	%
Water	Water	-	42.51
Sericite CS-15	Mica	Miyoshi America	2.00
Corn Starch	Corn Starch	Spectrum Chemical	4.00
Lexgard® OE 90	Caprylyl Glycol (and) Ethylhexylglycerin	INOLEX	0.70
HAISUGARCANE BG	1,3 Butylene Glycol	Miyoshi America	4.00
Simulsol 165	PEG-100 Stearate (and) Glyceryl Stearate	SEPPIC	2.00
Tween™ 80	Polysorbate 80	Croda	4.50
Palmitic Acid	Phenoxyethanol	Protameen Chemicals	2.00
Glycerine 99.7%	Glycerin	Acme Hardesty Col	2.00
Potassium Hydroxide Solution 10%	Potassium Hydroxide (and) Water	EMD	1.40
MiyoSHADE T Plus-Natural	Titanium Dioxide and Isostearic Acid	Miyoshi America	18.09
MiyoFLEX EV-RED	Iron Oxides (and) Hydrogenated Olive Oil Stearyl Esters (and) Sodium Myristoyl Glutamate (and) Aluminum Hydroxide	Miyoshi America	0.44
MiyoFLEX EV-YELLOW	Iron Oxides (and) Hydrogenated Olive Oil Stearyl Esters (and) Sodium Myristoyl Glutamate (and) Aluminum Hydroxide	Miyoshi America	1.12
MiyoFLEX-BLACK	Iron Oxides (and) Hydrogenated Olive Oil Stearyl Esters (and) Sodium Myristoyl Glutamate (and) Aluminum Hydroxide	Miyoshi America	0.24
Floraesters® 15	Jjoba Esters	Floratech	4.00
Floraesters® 30	Jjoba Esters	Floratech	3.00
Permulgin D	Cetearyl Alcohol (and) Ceteareth-20	Koster Keunen	3.00
Risonol 20SP	Octyldodecanol	Miyoshi America	5.00
Total			100.00

PROCEDURE:

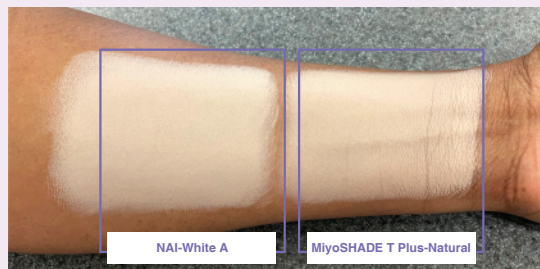
1. Begin heating the water from Phase A to about 75 to 85° C, while mixing with a propeller mixer at 400 rpm.
2. Once temperature is reached, add the remainder of Phase A, one at a time and increase mixing speed to 500 to 600 rpm. Continue mixing 15 minutes.
3. Move Phase A to a homogenizer and begin homogenizing @ 5000 rpm.
4. Add Phase B to a beaker and begin mixing (@ 600 rpm w/propeller mixer) and heating to 80°C. Once Phase B is completely uniform, continue mixing an additional 5 minutes.
5. Slowly add Phase B to Phase A and continue mixing for 10 minutes at 5000 rpm.
6. Cool and fill into desired liquid foundation packaging.

IN-VIVO SPF:

FDA: 20.3

COLIPA: 23.9

Using 18.09% MiyoSHADE T Plus-Natural (Active TiO2 = 17.58%)



MiyoSHADE T Plus-Natural (Attenuation Grade) vs. NAI-White A (Pigmentary Grade)
18.09 TiO2 usage in Liquid Foundation



Non-Nano



High SPF



Globally Compliant

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