TRÈS BN®

Boron Nitride Cosmetic Powders

Reference Formulary

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The Story of TRÈS BN® Cosmetic Powders

The brand TRÈS BN was conceived by Carborundum Corp. in 1992 which already had a long history in manufacturing Boron Nitride dating back to the 1950's. Carborundum Corp. was acquired by Saint-Gobain in 1996 and the TRÈS BN brand has been evolving ever since. Today, Saint-Gobain boron nitride powders are well known among formulators of the leading brands of color cosmetics and skin care products worldwide.

Hexagonal Boron Nitride is a synthesis of Borax and a Nitrogen source at high temperature resulting in a lamellar structure that resembles graphite, except pure hBN is white. TRÈS BN Cosmetic Powders are lubricious, chemically inert, photo-stable, adherent, and have a refractive index of 1.74 – very close to that of human skin, making it an ideal ingredient in skin care and color cosmetics.

Achieving the perfect balance in how a final product affects our senses, flows through a process and costs, is the formulator's challenge. TRÈS BN powders are not only soft, but work in synergy with many other materials to achieve this balance. TRÈS BN brand offers many grades, each having a unique particle size distribution and crystal morphology. Whether it's the shimmer of an eye shadow, the coverage in a foundation or the smooth and creamy glide of face powder, TRÈS BN powders offer formulators many solutions wrapped into one material.

The story continues with you, our customer. We invite you to explore our reference formulary and tap into your own creativity using TRÈS BN.

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Foundations

Silky, Long-lasting Foundation with PUHP3002 (SGLLF-3002-EU)

A silicone foundation with good spreading, even application and silky texture

Procedure

- Add fluid silicones to the crosspolymers under agitation until system is homogeneous.
- Add preservative (phase A). Disperse Distinctive Gel into phase A.
- Thoroughly disperse pigments and sunscreens into the fluid ingredients (phase B) and add to phase A+B under fast stirring.
- Disperse PUHP and KMP into phase A+B+C.
- Prepare the water phase (phase D) and slowly add it to the oil phase under agitation.

Notes

- *Formulation by Prodotti Gianni*

Phase	Trade Name (Supplier)	INCI Name	Function	% w/w
A.	**KSG-210** *(Shin Etsu)*	Dimethicone, Dimethicone/PEG-10/15 Crosspolymer	Emulsifier, Texturizing Agent	3.00
	KSG-16 *(Shin Etsu)*	Dimethicone, Dimethicone/Vinyl Dimethicone Crosspolymer	Texturizing Agent, Thickener	4.00
	KF-6038 *(Shin Etsu)*	Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone	Emulsifier	1.25
	KF-96L-2cS *(Shin Etsu)*	Dimethicone	Emollient	10.00
	Dekaben C4 *(Jan Dekker)*	Phenoxyethanol, Methylparaben, Ethylparaben, Butylparaben, Propylparaben	Preservative	0.90
B.	**Distinctive GEL ID** *(Resources of Nature)*	Isododecane, Quaternium-90 Bentonite, Propylene Carbonate	Rheology Modifier	2.00
C.	**KF-96L-2cS** *(Shin Etsu)*	Dimethicone	Emollient	5.00
	KP-545L *(Shin Etsu)*	Dimethicone, Acrylates/Dimethicone Copolymer	Dispersing Agent, Film Former	2.00
	Octyl Methoxycinnamate 0307 *(Kyowa Hakko)*	Ethylhexyl Methoxycinnamate	UV-B Filter	2.00
	FDP-C-White3 *(Jigen)*	Talc, CI 77891, Hydrogen Dimethicone, Aluminum Hydroxide	Pigment	6.84
	FDP-C-Da-Yellow *(Jigen)*	CI 77492, Talc, Hydrogen Dimethicone	Pigment	2.04
	FDP-C-Da-Red *(Jigen)*	CI 77491, Talc, Hydrogen Dimethicone	Pigment	0.62
	FDP-C-Da-Black *(Jigen)*	CI 77499, Talc, Hydrogen Dimethicone	Pigment	0.50
	Zano 10 Plus *(Jan Dekker)*	Zinc Oxide, Triethoxycaprylylsylane	UV-screen	2.00
D.	**PUHP3002** *(Saint Gobain)*	Boron Nitride	Texturizing Agent	3.00
	KMP-590 *(Shin Etsu)*	Polymethylsilsesquioxane	Texturizing Agent	2.00
E.	Deionized Water	Aqua		51.85
	Sodium Chloride	Sodium Chloride	Stabilizer	1.00

Silky, Long-lasting Foundation with PUHP3002 (SGLLF-3002-US)

A silicone foundation with good spreading, even application and silky texture.

Procedure

- Add fluid silicones to the crosspolymers under agitation until system is homogeneous.
- Add preservative (phase A). Disperse Distinctive Gel into phase A.
- Thoroughly disperse pigments and sunscreens into the fluid ingredients (phase B) and add to phase A+B under fast stirring.
- Disperse PUHP and KMP into phase A+B+C.
- Prepare the water phase (phase D) and slowly add it to the oil phase under agitation.

Phase	Trade Name/Supplier	INCI Name	Function	%w/w
A	KSG-210 / Shin Etsu	Dimethicone (and) Dimethicone/PEG-10/15 Crosspolymer	Emulsifier, Texturizing Agent	4.5
	KSG-16 / Shin Etsu	Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer	Texturizing Agent, Thickener	4.35
	KF-6038 / Shin Etsu	Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone	Emulsifier	1.25
	DMF-2cs / Shin Etsu	Dimethicone	Emollient	10
B	Euxyl K 300 / Schulke Inc.	Phenoxyethanol (and) Methylparaben (and) Butylparaben (and) Ethylparaben (and) Propylparaben (and) Isobutylparaben	Preservative	0.9
C	Distinctive Gel ID / Resoursed of Nature	Quaternium-90 Bentone (and) Isododecane (and) Propylene Carbonate	Rheology Modifier	2
D	DMF-2cs / Shin Etsu	Dimethicone	Emollient	5
	KP-545L / Shin Etsu	Dimethicone (and) Acrylates/Dimethicone Copolymer	Dispersing Agent, Film Former	2
	Parsol MCX / DSM Nutritional Products, Inc.	Ethylhexyl Methoxycinnamate	UV-B Filter	2
	DHL-TRI-77891 / US Cosmetics Corporation	Titanium Dioxide (and) Dimethicone	Pigment	6.84
	DHL-Y-77492 / US Cosmetics Corporation	Iron Oxides (and) Dimethicone	Pigment	2.04
	DHL-R-77491 / US Cosmetics Corporation	Iron Oxides (and) Dimethicone	Pigment	0.62
	DHL-B-77499 / US Cosmetics Corporation	Iron Oxides (and) Dimethicone	Pigment	0.5
	Zano 10 Plus / Umicore Zinc Chemicals	Zinc Oxide (and) Triethoxycaprylylsilane	UV-Screen	2
E	PUHP3002 / Saint Gobain	Boron Nitride	Texturizing Agent	3
	KMP-590 / Shin Etsu	Polymethylsilsesquioxane	Texturizing Agent	2
F	Deionized Water	Water	Solvent	50
	Sodium Chloride / Cargill Inc.	Sodium Chloride	Stabilizer	1
				100.00%

General Foundation with PUHP3002 (SGF-3002)

A high hiding and natural looking foundation with excellent spreadability, adhesion and soft texture with medium-beige color and slight pink undertones

Procedure

- Add fluid silicones to the cross polymers under agitation until system is homogeneous.
- Add preservative (phase A). Prepare the water phase (phase B) and slowly add it to phase A under slow agitation.
- When water is incorporated speed up agitation and thoroughly disperse pigments and UV-filters into the fluid silicones (phase C) and add to phase A+B under fast stirring.
- Disperse PUHP3002 into the foundation.

Notes

- TRÈS BN PUHP3002 can be dispersed into fluid silicones of phase C together with pigments. Alternatively, the dispersion of powders can be incorporated into phase A before emulsification.
- The pigments used are characterized as being easy to disperse. However, the pigment dispersion can be further improved by a three-roll mill process.
- *Formulation by Prodotti Gianni*

Phase	Trade Name (Supplier)	INCI Name	Function	% w/w
A.	KSG-210 *(Shin-Etsu)*	Dimethicone (and) Dimethicone/PEG-10/15 Crosspolymer	Emulsifier, texturizing	3.00
	KSG-15 *(Shin-Etsu)*	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer	Thickener, texturizing	4.00
	KF-6038 *(Shin-Etsu)*	Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone	Emusifier	1.25
	KF-995 *(Shin-Etsu)*	Cyclopentasiloxane	Vehicle	10.00
	Dekaben *(Jan Dekker)*	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben (and) Butylparaben	Preservative	0.60
B.	Deionized Water	Aqua		to 100
	Sodium Chloride	Sodium Chloride	Stabilizer	1.00
C.	KF-995 *(Shin-Etsu)*	Cyclopentasiloxane	Vehicle	5.00
	KP-545 *(Shin Etsu)*	Cyclopentasiloxane (and) Acrylates/Dimethicone Copolymer	Dispersing, film former	2.00
	FDP-C White *(Jigen)*	Talc (and) C.I. 77891 (and) Dimethicone/Methicone Copolymer	Pigment	5.00
	FDP-C Yellow *(Jigen)*	Talc (and) C.I. 77891 (and) C.I. 77492 (and) Dimethicone/Methicone Copolymer	Pigment	2.27
	FDP-C Red *(Jigen)*	Talc (and) C.I. 77891 (and) C.I. 77491 (and) Dimethicone/Methicone Copolymer	Pigment	0.88
	FDP-C-Da Red *(Jigen)*	Talc (and) C.I. 77491 (and) Dimethicone/Methicone Copolymer	Pigment	0.50
	FDP-C Black *(Jigen)*	Talc (and) C.I. 77891 (and) C.I. 77499 (and) Dimethicone/Methicone Copolymer	Pigment	0.88
	FDP-C-Da Black *(Jigen)*	C.I. 77499 (and) Dimethicone/Methicone Copolymer	Pigment	0.50
	Parsol MCX *(DSM)*	Ethylhexyl Methoxycinnamate	UV-B filter	2.00
	Z-Cote HP1 *(Basf)*	Zinc Oxide (and) Triethoxycaprylylsilane	UVA, UV-B filter	2.00
D.	PUHP3002 *(Saint-Gobain Ceramic Materials)*	Boron Nitride	Texturizing	3.00

Illuminating Finish BB Cream with PUHP500 (SGBBI-500)

A full coverage "honey" colored BB cream with subtle luminosity

Procedure

- Heat both phases A and C to 75-80℃
- Add phase B to A one by one, stir well and homogenize for 30 second
- Add phase C to AB slowly under fast stirring (about 500 r/min), then homogenize (about 10000 r/min) for 1 minute.
- Cool down to 45℃ add phase D

Notes

- *Formulation by Shanghai Sciencoo Biotechnology Ltd.*

Phase	Trade Name	INCI Name	Suppliers	% (w/w)
A	Abil EM90	Cetyl PEG/PPG-10/1 Dimethicone	EVONIK Goldschmidt	2.5
	LAMEFORM® TGI	Polyglyceryl-3 Diisostearate	Cognis	2.0
	LIPONATE TDS	Tridecyl Stearate	LIPO	8.0
	LIPONATE TDTM	Tridecyl Trimellitate	LIPO	2.0
	LIPOVOL GTB	Tribehenin	LIPO	1.5
	Silsoft 034	Caprylyl methicone	Momentive	3.0
	Prinsepia Utilis Royle Extract	Prinsepia Utilis Royle Extract	**Sciencoo**	7.0
	Magnesium Stearate	Magnesium Stearate		0.5
B	**Compounded Foundation Powder (illuminating finish)**	CI 77891,CI 77718,CI 77491,CI 77492,CI 77499, N-Octyltriethoxysilane, Dimethicone	**Sciencoo**	10.0
	TRÈS BN PUHP500	Boron Nitride	**Saint-Gobain Advanced Ceramics**	2.0
C	Water			To100
	1 , 3-Butylene Glycol			8.0
	$MgSO_4*7H_2O$			0.7
	Glycerin			5.0
D	Preservative			q.s.
	Perfume			q.s.

Natural Finish BB Cream with PUHP500 (SGBBN-500)

A full coverage "honey colored" BB cream with matte finish

Procedure

- Heat both phases A and C to 75-80℃
- Add phase B to A one by one, stir well and homogenize for 30 second
- Add phase C to AB slowly under fast stirring (about 500 r/min), then homogenize (about 10000 r/min) for 1 minute.
- Cool down to 45℃ add phase D

Notes

- *Formulation by Shanghai Sciencoo Biotechnology Ltd.*

Phase	Trade Name	INCI Name	Suppliers	% (w/w)
A	Abil EM90	Cetyl PEG/PPG-10/1 Dimethicone	EVONIK Goldschmidt	2.5
	LAMEFORM® TGI	Polyglyceryl-3 Diisostearate	Cognis	2.0
	LIPONATE TDS	Tridecyl Stearate	LIPO	8.0
	LIPONATE TDTM	Tridecyl Trimellitate	LIPO	2.0
	LIPOVOL GTB	Tribehenin	LIPO	1.5
	Silsoft 034	Caprylyl methicone	Momentive	3.0
	Prinsepia Utilis Royle Extract	Prinsepia Utilis Royle Extract	**Sciencoo**	7.0
	Magnesium Stearate	Magnesium Stearate		0.5
B	**Compounded Foundation Powder (natural finish)**	CI 77891, CI 77718, CI 77491,CI 77492, CI 77499, N-Octyltriethoxysilane, Dimethicone	**Sciencoo**	10.0
	TRÈS BN PUHP500	Boron Nitride	**Saint-Gobain Ceramic Materials**	2.0
C	Water			To100
	1 , 3-Butylene Glycol			8.0
	MgSO4*7H2O			0.7
	Glycerin			5.0
D	Preservative			q.s.
	Perfume			q.s.

Lipsticks

Lipstick with PUHP1108 (SGLS-1108)

Cinnamon parfait best describes the color and shine of this long lasting, smooth and creamy formula.

Procedure

- The color grind is prepared in advance by stirring the pigments into the castor oil, then milling using a three roll mill until the agglomerates are reduced to less than 10 um.
- Combine and heat Phase A while stirring to 85° C until clear.
- Add Phase B, allowing the temperature to drop to 75° C
- Combine Phase C with high speed agitation and add to Phases A and B.
- Stir the batch (under vacuum, if available) to de-air and fill at 72 – 75° C.

Notes

- *Formulation by JCH Consulting*

Phase	Ingredient (INCI Name)	Supplier	% (w/w)
A	Schercemol TISC (Tri-isostearoyl Citrate)	Lubrizol	23.10
	Crystal O (Castor oil)	Caschem	20.20
	Ceraphyl ODS (Octyldodecyl Stearate)	ISP	10.00
	Candellila Wax, refined	Ross	6.00
	Schercemol PTID (Tri-isostearoyl Polyglyceryl-3 Dimer Dilinoleate)	Lubrizol	5.00
	Microcrystalline Wax 214	Ross	4.50
	Ozokerite 170D	Ceresin, Ross	2.50
	Carnauba Wax No. 1	Ross	1.40
	Benzoic Acid		0.20
	Ascorbyl Palmitate	Hoffman-La Roche	0.05
B	Castor Oil		6.50
	c33-5138, Iron Oxides (burgundy)	Sun Chemical	3.40
	c47-056, Titanium Dioxide	Sun Chemical	1.00
	c33-8073, Iron Oxides (yellow)	Sun Chemical	0.70
	c19-012, Red 6 Lake (or c19-7712)	Sun Chemical	0.40
	C33-4433, Blue 1 Lake	Sun Chemical	0.05
C	Castor Oil		8.00
	Boron Nitride (TRÈS BN® PUHP1108)	Saint-Gobain Ceramic Materials	7.00

Powders

Blush with PUHP3008 (SGB-3008)

Soft and creamy blush – neutral rose – medium intensity

Procedure

- Combine dry ingredients.
- Mill until color is dispersed.
- Spray on oil with high intensity agitation.
- Press into pans.

Notes

- In the EU, colors are listed by CI #.
- The talc used was an all-purpose talc, 90% of the particles are under 10 µm.
- Mica used is a white, wet ground grade.
- Zinc Stearate is USP grade
- *Formulation by JCH Consulting*

Ingredient (Supplier)	INCI Name	% (w/w)
Talc (D90 <10µm)	Talc	74.7
Zinc Stearate, USP	Zinc Stearate	3.0
PUHR 3008 Boron Nitride		5.0
Mica (D90 <45µm)	Mica	10.0
	Red 30 Lake/CI 73360	0.8
Yellow Iron Oxide	Iron Oxides/CI 77492	1.0
Red Iron Oxide	Iron Oxides/CI 77491	0.8
Black Iron Oxide	Iron Oxides/CI 77499	0.4
Methyl Paraben		0.2
Propyl Paraben		0.1
Cromollient DP3A (Croda)	Di-PPG-3 Myristyl Ether Adipate	4.0

Concealer Pressed Face Powder with PUHP500 (SGCPP-500)

A soft powder based on pigments with a lipophilic surface-treatment characterized by soft focus effect and good adherence on the skin.

Procedure

- Weigh all ingredients of phase A and mill them for 2 minutes.
- Take some part of phase A, add it to binder and preservative (phase B) and mix.
- Add this blend to phase A and mill again for other 2 minutes.
- Pass the powder through a sieve (125 µm) and then press it.

Notes

- *Formulation by Prodotti Gianni*

Phase	Trade Name	INCI Name	Function	%
A.	Talc Superior M10 Dec (Luzenac)	Talc	Filler	70.40
	Sericite O (Toshiki)	Mica	Filler	10.00
	PUHP500 (Saint -Gobain)	**Boron Nitride**	Texturizing Agent	**5.00**
	Microslip 519L (Micro Powders)	PTFE	Texturizing Agent	2.00
	WCP-2039-White (Jigen)	C.I. 77891 (and) Talc (and) Magnesium Stearate (and) Mica (and) Stearic Acid (and) Aluminum Hydroxide	Pigment	2.50
	WCP-2039-Da-Yellow (Jigen)	C.I. 77891 (and) Talc (and) C.I. 77492 (and) Magnesium Stearate (and) Mica (and) Aluminum Hydroxide (and) Stearic Acid	Pigment	2.50
	WCP-2039-Da-Red (Jigen)	C.I. 77891 (and) Talc (and) C.I. 77491 (and) Magnesium Stearate (and) Mica (and) Aluminum Hydroxide (and) Stearic Acid	Pigment	2.50
	WCP-2039-Da-Black (Jigen)	C.I. 77891 (and) Talc (and) C.I. 77499 (and) Magnesium Stearate (and) Mica (and) Aluminum Hydroxide (and) Stearic Acid	Pigment	2.50
B.	Dermol 1818 (Alzo)	Isostearyl Isostearate	Binder	2.00
	Dekaben (Jan Dekker)	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Isobutylparaben (and) Propylparaben	Preservative	0.60

Loose Face Powder with PUHP1109 (SGLP-1109)

Translucent and light, this is a natural looking face powder with a soft texture and medium bisque color.

Procedure

- Combine dry ingredients.
- Mill until color is dispersed.
- Spray on oil with high intensity agitation
- Fill containers.

Notes

- In the EU, colors are listed by CI #.
- The talc used was a fine, platy talc, 90% of the particles are under 15 µm.
- Zinc Stearate is USP grade
- *Formulation by JCH Consulting*

Ingredient (Supplier)	INCI Name	% (w/w)
Talc (D90 <15µm)	Talc	46.05
Zinc Stearate USP	Zinc Stearate	1.00
PUHP1109 (Saint-Gobain Ceramic Materials)	Boron Nitride	10.00
Sericite	Mica	20.00
Hydrophobic Mica	Mica, Methicone	10.00
Titanium Dioxide	Titanium Dioxide/CI 77891	8.50
Yellow Iron Oxide	Iron Oxides/CI 7749	0.90
Red Iron Oxide	Iron Oxides/CI 77491	0.60
Black Iron Oxide	Iron Oxides/CI 77499	0.15
Methyl Paraben		0.20
Propyl Paraben		0.10
Abil 9801 (Degussa)	Cetyl Dimethicone	2.50

Pressed Face Powder with PUHP3008 (SGFP-3008)

Ultra-smooth, creamy texture, bisque color, and translucent finish

Procedure

- Weigh all ingredients of phase A and mill for 2 minutes.
- Take a portion of phase A , add it to the binder (phase B) and mix.
- Add this blend to phase A and mill again for 2 additional minutes.
- Screen powder through a 125 um sieve and press.

Notes

- 14 grams of powder are used for a 58 mm container and pressed at 10 bars.
- Parameters must be adjusted according to customer equipment.
- *Formulation by Prodotti Gianni*

Phase	Trade Name (Supplier)	INCI Name	Function	% (w/w)
A.	Prever M10 Dec (Luzenac)	Talc	Filler	68.40
	Sericite O (Toshiki Pigment)	Mica	Filler	10.00
	PUHP3008 (Saint-Gobain Ceramic Materials)	Boron Nitride	Texturizing Agent	5.00
	FDP-C-White (Prodotti Gianni)	Talc (asd) C.I. 77891 (and) Dimethicone/Methicone Copolymer	Pigment	4.73
	FDP-C-Da-Yellow (Prodotti Gianni)	Talc (and) C.I. 77492 and) Dimethicone/Methicone Copolymer	Pigment	3.40
	FDP-C-Da-Red (Prodotti Gianni)	Talc (and) C.I. 77491 (and) Dimethicone/Methicone Copolymer	Pigment	1.03
	FDP-C-Da-Black (Prodotti Gianni)	Talc (and) C.I. 77499 (and) Dimthicone/Methicone Copolymer	Pigment	0.84
B.	KF-96-350cS (Shin Etsu)	Dimethicone	Binder	6.00
	Dekaben (Jan Dekker)	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Isobutylparaben (and) Propylparaben	Preservative	0.60

Talc-free Pressed Face Powder with PUHP3008 (SGTalcFree-3008)

A soft powder based on pure pigments and formulated without using talc

Procedure

- Weigh all ingredients of phase A and mill them for 2 minutes.
- Take some part of phase A, add it to binders and preservative (phase B) and mix.
- Add this blend to phase A and mill again for other 2 minutes.
- Pass the powder through a sieve (125 µm) and then press it.

Notes

- *Formulation by Prodotti Gianni*

Phase	Trade Name (Supplier)	INCI Name	Function	% w/w
A.	**Sericite O** *(Toshiki)*	Mica	Filler	63.40
	Microsilk 418 *(Micro Powders)*	Polyethylene, PTFE, Synthetic Wax	Texturizing Agent	10.00
	Prizmalite P2015SL *(Prizmalite)*	Glass Beads	Texturizing Agent	10.00
	PUHP3008 *(Saint Gobain Ceramic Materials)*	Boron Nitride	Texturizing Agent	5.00
	Titanium White E-171 *(Proquimac Food & Pharma)*	CI 77891	Pigment	2.50
	Yellow Coninor E-172 *(Proquimac Food & Pharma)*	CI 77492	Pigment	1.70
	Red Coninor E-172 *(Proquimac Food & Pharma)*	CI 77491	Pigment	0.50
	Black Coninor E-172 *(Proquimac Food & Pharma)*	CI 77499	Pigment	0.30
B.	**KF-96A-350cS** *(Shin Etsu)*	Dimethicone	Binder	6.00
	Dekaben *(Jan Dekker)*	Phenoxyethanol, Methylparaben, Ethylparaben, Butylparaben, Isobutylparaben, Propylparaben	Preservative	0.60

Velvety Pressed Face Powder with PUHP3008 (SGVPP-3008)

A creamy powder based on silicone-treated powders with a velvety texture upon and after application.

Procedure

- Weigh all ingredients of phase A and mill them for 2 minutes.
- Take some part of phase A, add it to binders and preservative (phase B) and mix.
- Add this blend to phase A and mill again for other 2 minutes.
- Pass the powder through a sieve (125 µm) and then press it.

Notes

- *Formulation by Prodotti Gianni*

Phase	**Trade Name (Supplier)**	**INCI Name**	**Function**	%
A.	Talc Superior M10 Dec (Luzenac)	Talc	Filler	70.40
	Sericite O (Toshiki)	Mica	Filler	10.00
	PUHP3008 (Saint Gobain Ceramic Materials)	Boron Nitride	Texturizing Agent	5.00
	FDP-C-White (Jigen)	Talc (and) C.I. 77891 (and) Dimethicone/Methicone Copolymer	Pigment	4.73
	FDP-C-Da-Yellow (Jigen)	Talc (and) C.I. 77492 (and) Dimethicone/Methicone Copolymer	Pigment	3.40
	FDP-C-Da-Red (Jigen)	Talc (and) C.I. 77491 (and) Dimethicone/Methicone Copolymer	Pigment	1.03
	FDP-C-Da-Black (Jigen)	Talc (and) C.I. 77499 (and) Dimethicone/Methicone Copolymer	Pigment	0.84
B.	KF 96350cS (Shin Etsu)	Dimethicone	Binder	1.00
	Liponate 2-DH (Lipo)	PEG-4 Diheptanoate	Binder	3.00
	Dekaben (Jan Dekker)	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Isobutylparaben (and) Propylparaben	Preservative	0.60

Skin Care

Delicate Weightless Sunblock Lotion with PUHP3002 (SGSB-3002)

Procedure

- Heat phase A to 60-65℃; Heat phase C to 70℃.
- Add phases B to A one by one, stir well and homogenize for 30 seconds
- Add phase C to AB slowly under fast stirring (about 500 r/min), then homogenize (about 10000 r /min) for 1 minute.
- Cool down to 45℃ add phase D.

Notes

- *Formulation by Shanghai Sciencoo Biotechnology ltd.*

Phase	Trade Name (Supplier)	INCI Name	% (w/w)
A	Abil EM90 (EVONIK Goldschmidt)	Cetyl PEG/PPG-10/1 Dimethicone	1.00
	Sensurf 6435 (Sciencoo)	Polyglyceryl-3 Diisostdarate, Sorbitan Trioleate, PEG-30 Dipolyhy-droxystearate	2.50
	PIONIER 7028 P (Hansen & Rosenthal KG)	Mineral Oil	12.00
	PIONIER 0030 SYN FG (Hansen & Rosenthal KG)	Polydecene	5.00
	PIONIER 7646 (Hansen & Rosenthal KG)	Petrolatum	2.00
	Uvinul MC 80 (BASF)	Octyl Methoxycinnamate	8.00
	Vitamin E (BASF)	Tocopherol	0.50
B	T-lique AB50Si (Sciencoo)	Titanium Dioxide, C12-15Alkyl Benzoate, PEG-30 Dipolyhydroxystearate, Polyhydroxystearic Acid Silica, Silicone	16.00
	TRÈS BN PUHP3002 (Saint-Gobain Ceramic Materials)	Boron Nitride	2.00
C	Water		to 100
	BETAINE (Sciencoo)	Betaine	3.00
	$MaSO_4 .7H_2O$	Magnesium Sulfate	1.50
	Glycerin	Glycerin	6.00
D	Preservative		q.s.
	Perfume		q.s.

Moisturizing Face Lotion with PUHP3002 (SGFL - 3002)

A lightweight moisturizing fluid with easier spreading and less tack due to the addition of TRÈS BN cosmetic powder PUHP3002

Procedure

- Heat phase A to 75°C.
- Melt phase B at 75°C..
- Disperse phase B1 shortly before emulsifying with B.
- While stirring, add B to A and homogenize.
- Cool down to 50°C while continuing stirring.
- Add phases C and D.
- Adjust pH with phase E.

Notes

- *Formulation by Biesterfeld Spezialchemie GmbH, Hamburg, Germany.*

Phase	Trade Name	INCI/EU-Labeling	% (w/w)
A	Deionized Water	Aqua	69.20
	Glycerin	Glycerin	2.50
B	Phtyocream 2000	Potassium Palmitoyl Hydrolyzed Wheat Protein, Glyceryl Stearate, Cetearyl Alcohol	6.00
	Miglyol 812	Caprylic/Capric Triglyceride	10.00
	Dicaprylyl Ether	Cetiol OE	6.00
B1	TRÈS BN PUHP 3002 (Saint-Gobain Ceramic Materials)	Boron Nitride	3.00
C	Viscolam AT 100P	Sodium Polyacryloyldimethyl Taurate (38%), Hydrogenated Polydecene, Trideceth-10	1.50
D	Geogard Ultra	Gluconolactone (75%), Sodium Benzoate (25%)	1.00
	Parf. Baby Cotton 449264 (free of SCCNFP sensitizer)	Parfum	0.20
E	Sodium Hydroxide (sol.10%)	Sodium Hydroxide (sol.10%)	0.60

Moisturizing Day Cream with PUHP1109 (SGMDC-1109)

A creamy day cream enhanced with Boron Nitride for improved pick-up , play time and soft focus

Procedure

- Weigh components of phase A and heat up to 70°C.
- Heat the water phase (B) up to 70°C.
- Add phase A to phase B using a homogenizer.
- Cool down and below 40°C add phase C and phase D.
- Disperse boron nitride and then adjust pH.

Notes

- *Formulation by Prodotti Gianni*

Phase	Trade Name (Supplier)	INCI Name	Function	% (w/w)
A	Emulprogress 57 (Prodotti Gianni)	Cetearyl Alcohol (and) Polyglyceryl-10 Stearate (and) Polyglyceryl-6 Tristearate (and) Hydroxypropyl Guar	Emulsifier	4.00
	Nikkol Trifat S-308 *(Nikko)*	Triethylhexanoin	Emollient	7.00
	Dermol 816 *(Alzo)*	Ethylhexyl Palmitate	Emollient	4.00
	Phytrox LT10-IP (Jan Dekker)	Elianthus Annuus Seed Oil (and) Lecithin (and) Tocoperol (and) Ascorbyl Palmitate	Antioxidant	0.20
	OMC *(Daiichi)*	Ethylhexyl Methoxycinnamate	UV-B filter	3.00
	Butyl Methoxydibenzoyl-methane *(Daiichi)*	Butyl Methoxydibenzoylmethane	UV-A filter	1.00
	Dekarité *(Jan Dekker)*	Butyrospermum parkii (Shea) Butter	Emollient	1.00
	KF-96-350cS (Shin-Etsu)	Dimethicone	Anti-whitening	1.00
B	Water	Aqua		to 100
	1.3-Butilenglicole *(Daiichi)*	Butylene Glycol	Humectant	3.00
	Disodium EDTA	Disodium EDTA	Chelating Agent	0.05
C	Pheohydrane *(Codif)*	Aqua (and) Hydrolyzed Algin (and) Chlorella vulgaris Extract (and) Maris Aqua	Moisturize	2.00
	G.P.S. *(Exsymol)*	Silanetriol Trehalose Ether	Moisturizer	4.00
D	Dekaben *(Jan Dekker)*	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Isobutylparaben (and) Propylparaben	Preservative	0.80
	PSV 892/3M (GRC Parfum)	Parfum		0.15
E	PUHP1109 (Saint-Gobain Ceramic Materials)	Boron Nitride	Texturizing Agent	3.00

Tensing Anti-Age Eye Serum with Soft Focus PUHP3002 (SGES-3002)

A gentle eye serum formula that takes advantage of the natural anti-aging properties of Quinoa Protein and soft focus properties of TRÈS BN Boron Nitride grade PUHP3002.

Procedure

- Add DI water to tank and begin mixing.
- Add ingredients from Phase A one at a time until fully dispersed.
- Begin heating to 70°C while mixing. Once batch reaches a temperature of 70°C, begin cooling.
- Once batch reaches at temperature of 45-50°C, begin adding Phase B ingredients and mix until uniform.
- Premix Phase C and add to the tank while mixing.
- Once fully dispersed add Phase D and mix until uniform.

Notes

- *Formula courtesy of Vege-Tech and Paradigm Science*

Phase	INCI Name	Supplier	% (w/w)
A	DI Water		QS
	Allantoin		0.001
	Disodium EDTA		0.08
	Zemea (Propanediol)		3.00
	Carbopol 980		0.40
	Boron Nitride (PUHP3002)	**Saint-Gobain**	**1.00**
B	VPS 2141 Superfruit and Anti-Oxidant Blend	Vegetech	2.0
	VP9762 Quinoa Protein	Vegetech	8.00
	Naolys Vitis Flower in Glycerin	Paradigm Science	0.05
C	Polysorbate 20		1.00
	AE PROTEK NPB	AE Chemie	1.00
D	TRIETHANOLAMINE 99%		0.80
	TOTAL		100.0