Superdispersible Natural Origin Hybrid Treatment

Amino Acid & PHSA

INCI name: *Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*

Code: ASGP

High dispersibility of pigments is critical for color development and formulation stability. Natural origin ingredients have become highly desired in the marketplace.

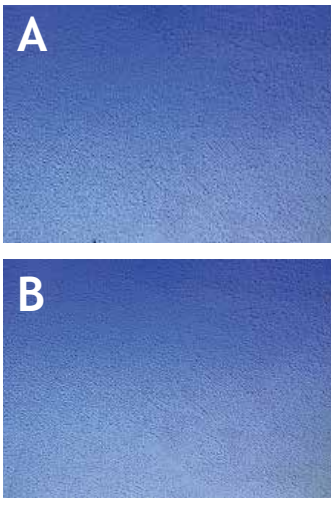
Kobo's response to these demands is the new **ASGP**, a natural origin surface treatment that enables full dispersion of pigments into formulations with use of only a high-speed mixer without the need for milling. **ASGP** renders treated powders hydrophobic, and superdispersible with minimal agitation and energy used during grinding phase. Superior dispersibility helps them be incorporated easily into anhydrous systems or oil phases of emulsions and facilitates fast and uniform color development.

ASGP treatment is recommended for emulsions, hot pours, anhydrous gels and powders. In formulation, it gives a creamy feel, true color and provides pressing aid in powder formulas. When applied on the skin, it promotes better wear properties due to the ASGP treated pigments' adhesion to skin.

US 9662280B2

Self-dispersible coated metal oxide powder, and process for production and use

Comparison of slurries mixed (A) by hand and (B) with a Speedmixer. Both slurries look the same under optical microscope (at 0.5% pigment loading), confirming how easy it is to disperse ASGP-treated pigments.

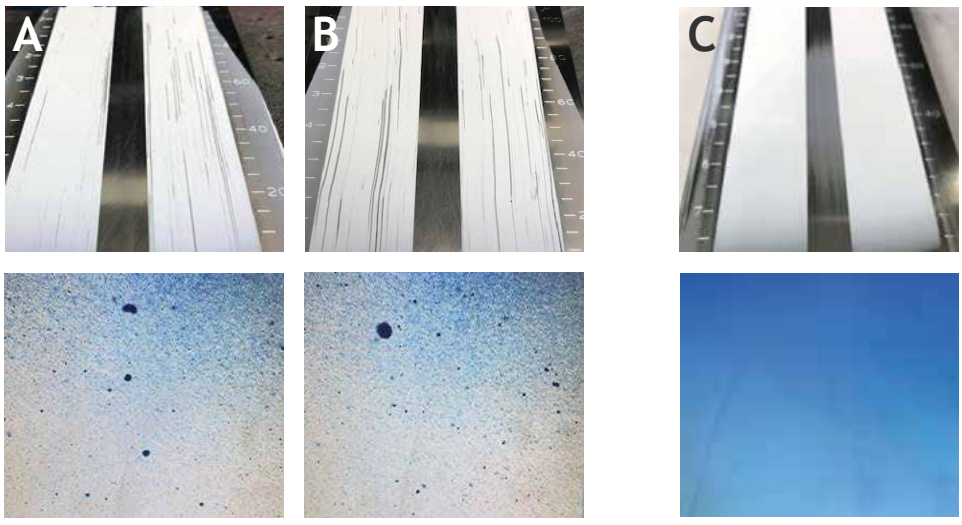


ZnO-750-ASGP6 - 25% slurries in C12-15 Alkyl Benzoate. (A) mixed by hand for 2 min.; (B) mixed on Speed-mixer at 2000 rpm for 20 sec.

Comparison of slurries of ASGP-treated pigment (C) to other naturally-treated pigments (A: Jojoba Esters; B: Amino Acid) on Hegman Gauge (top) and under optical microscope (bottom). ASGP-treated pigment is fully dispersed (Hegman Units >7).

Pigmentary TiO_2 with other Natural Origin Treatments

BTD-ASGP3



65% slurries of a Pigmentary Titanium Dioxide in C12-15 Alkyl Benzoate mixed on Speedmixer at 2000 rpm for 20 sec.

Trade Name	INCI Name	Product type
BWRO-ASGP3 C	*Iron Oxides (CI 77491) (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Red Iron Oxide
BWYO-ASGP3 C	*Iron Oxides (CI 77492) (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Yellow Iron Oxide
BWBO-ASGP3 C	*Iron Oxides (CI 77499) (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Black Iron Oxide
BGCO-ASGP5	*Chromium Oxide Greens (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Green Chromium Oxide
BMV-ASGP5	*Manganese Violet(And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Manganese Violet
BEUB-ASGP6	*Ultramarines (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Ultramarine Blue
BTD-V-ASGP3	*Titanium Dioxide (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Pigmentary TiO_2
BTD-ASGP3 C	*Titanium Dioxide (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Pigmentary TiO_2
TiO2 CR-50-ASGP3	*Titanium Dioxide (And) Alumina (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Pigmentary TiO_2
ZnO-PCC-ASGP4	*Zinc Oxide (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Pigmentary ZnO
BLUE 1AL-ASGP7	*Blue 1 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	FD&C Blue No. 1 Aluminum Lake
RED 22AL-ASGP7	*Red 22 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	D&C Red No. 22 Aluminum Lake
RED 28AL C-ASGP7	*Red 28 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	D&C Red No. 28 Aluminum Lake
RED 30AL-ASGP7	*Red 30 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	D&C Red No. 30 Aluminum Lake
RED 33AL-ASGP7	*Red 33 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	D&C Red No. 33 Aluminum Lake
RED 6BA C-ASGP7	*Red 6 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	D&C Red No. 6 Barium Lake
RED 7CA D-ASGP7	*Red 7 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	D&C Red No. 7 Calcium Lake
YELLOW 5AL-ASGP7	*Yellow 5 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	FD&C Yellow No. 5 Aluminum Lake
YELLOW 6AL C-ASGP7	*Yellow 6 Lake (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	FD&C Yellow No. 6 Aluminum Lake
GMS-ASGP4	*Mica (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Sericite
MICA S-ASGP3	*Mica (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	Mica
A15-TiO2-SA-ASGP12	*Titanium Dioxide (And) Hydrated Silica (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid (And) Aluminum Hydroxide*	UV-Attenuation TiO_2
ZNO-660-ASGP7 C	*Zinc Oxide (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	UV-Attenuation ZnO
ZNO-750-ASGP6	*Zinc Oxide (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	UV-Attenuation ZnO

ECOCERT COSMOS APPROVED

C *Raw materials approved by COSMOS*

Natural Origin Product

KSL-475B-EU

Clean Beauty Sunscreen Stick 3-in-1 Prime'n Glow with ZnO

SPF 37 | PFA 24 | CW 375

Part 1

• Dub Zenoat - Stearinerie Dubois: *Propanediol Dicaprylate*	27.40%
• **ZNO-660-ASGP7** - Kobo Products: *Zinc Oxide (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	25.00%
• Emotion Light - Roelmi HPC: *Tripelargonin*	18.30%
• **SunBoost ATB** - Kobo Products: *Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol*	4.00%
• Plurol Diisostearique - Gattefossé: *Polyglyceryl 3 Diisostearate*	2.00%
• Sensiva PA 40 - Schuelke: *Phenylpropanol (And) Propanediol (And) Caprylyl Glycol (And) Tocopherol*	0.60%

Part 2

• Sunflower Wax - Koster Keunen: *Helianthus Annus (Sunflower) Seed Wax*	3.70%
• Dub PTB - Stearinerie Dubois: *Pentaerythrityl Tetrabehenate*	3.00%
• Kesterwax K82H - Koster Keunen: *C20-40 Alkyl Stearate*	2.00%

Part 3

• **MSS-500/N** - Kobo Products: *Silica*	5.00%
• **CELLULOBEADS D-10-NPC2** - Kobo Products: *Cellulose (And) Hydrogenated Lecithin*	5.00%
• **KTZ® EXTRAFINE RED** - Kobo Products: *Titanium Dioxide (And) Mica*	1.50%
• **KTZ® EXTRAFINE GOLD** - Kobo Products: *Titanium Dioxide (And) Mica*	1.50%
• **MSS-500/3H** - Kobo Products: *Silica*	1.00%

Manufacturing Procedure

1. Prepare Part 1 by dispersing powder ZnO in liquid emollients.
2. Add Part 2, heat to 95°C, add Part 3 and mix till homogeneous.
3. Pour into containers at 85°C and leave to cool at RT.

Description

This easy-to-use, waterless, 3-in-1 product is a sunscreen primer that also gives a glow effect to the skin, containing mostly vegetal and mineral origin ingredients. The formula contains ZnO-660-ASGP7, a Zinc Oxide with very high transparency, to provide UV protection. ASGP treatment ensures that the Zinc Oxide can be well dispersed at low energy, adding to the environmentally friendly credentials of the formulation, whilst ensuring a consistently maximized SPF. It also contains SunBoost ATB for UV protection boosting and skin protecting efficacy.
Mineral microspheres, MSS-500/N and MSS-500/3H, contribute to weightless application and good payoff as well as soft focus effects on the skin. CELLULOBEADS D-10-NPC2, a 10 micron cellulose microsphere with hydrogenated lecithin treatment, which renders it more creamy, contributes softness and creaminess to the stick. KTZ® EXTRAFINE RED and GOLD are 1-15 micron particle size interference pearls that are responsible for the glow effect.

KLP-269A

Natural Lipstick with ASGP Treated Pigments

Part 1

• CASTOR OIL - Arista Industries, Inc.: *Ricinus Communis (Castor) Seed Oil*	23.50%
• **BWRO-ASGP3** - Kobo Products: *Iron Oxides (CI 77491) (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid*	18.00%
• Protachem™ CTG - Protameen: *Caprylic/Capric Triglyceride*	17.00%
• Myritol® 331 - BASF: *Cocoglycerides*	10.00%
• TEGOSOFT® OER - Evonik: *Oleyl Erucate*	10.00%

Part 2

• CARNAUBA WAX SP 63P - Strahl & Pitch: *Copernicia Cerifera (Carnauba) Wax*	9.00%
• Beeswax White Sp 422P - Strahl & Pitch: *Beeswax*	6.50%
• Avocado Butter - Naissance: *Butyrospermum Parkii Butter (And) Theobroma Cacao Seed Butter (And) Persea gratissima oil*	3.00%
• Lexgard® Natural - Inolex: *Glyceryl Caprylate (And) Glyceryl Undecylenate*	1.00%
• **MSS-500/5H** - Kobo Products: *Silica*	2.00%

Manufacturing Procedure

1. Combine Part 1 and homogenize until pigments are dispersed.
2. Add Part 2 and heat to 80°C under propeller mixer.
3. Add Part 3 and mix until uniform.
4. Pour into lipstick molds at 80°C.

Description

This all-natural lipstick formula has a creamy application and provides a high-impact shade. Kobo's ASGP treated pigment requires minimal energy to disperse and is responsible for the creamy feel. Silica microsphere MSS-500/5H increases payoff and absorbs excess oil without reducing the shine.