

Gransperse – 100% Naturally Derived Pigments



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Where Performance Matters

Topics of Discussion

01

Why use Gransperse?

Advantages vs:

- Pigment
- Dispersions

02

What is Gransperse?

- Gransperse CU
- Gransperse CDS

03

Gransperse Applicability

- Shade Opportunities
 - Uniformity
 - Compatibility
 - Pourability

Why Use Gransperse?

Difficulties of using powder pigments

- Production hazard
- Requires high shear
- Requires additional wetting agents
- Difficult to shade match
- Extra processing cost



Why Use Gransperse?

	Gransperse Dispersions	Traditional Dispersions
Reduced Production Time	✓	✓
Easier Shade Matching	✓	✓
Less Hazardous	✓	✓
Cost Saving	✓	✓
Compatibility Options	✓	✗
Shear-thinning/Pourable	✓	✗
Consistent Batch Quality/Reproducibility	✓	✗
Global Natural Compliance	✓	✗



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What is Gransperse?



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What is Gransperse?

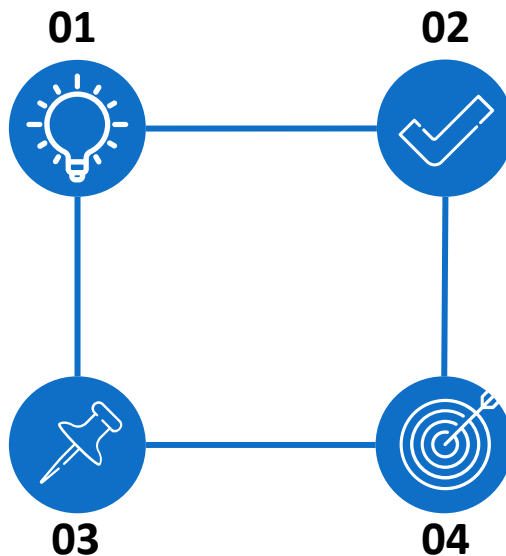
— A **unique Grant Technology** for formulators looking for a color solution

Select Pigment Choices:

- Untreated TiO_2 and Iron Oxides
- Vegetable Amino Acid Treated TiO_2 and Iron Oxides

Efficient wetting & suspending agents

- Polyglyceryl-6 Polyricinoleate
- Polyhydroxystearic Acid

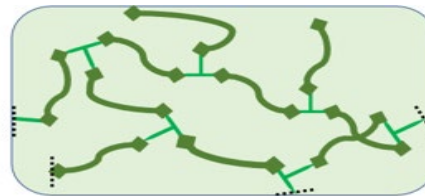
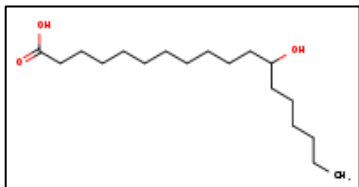


Widely compatible natural solvent

- Coco-Caprylate/Caprate

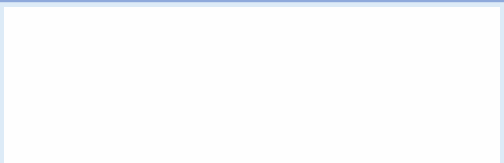
Exclusively Grant 100% Bio-based, Bio-degradable elastomer

- Provides enhanced spreadability
- Additional suspension
- Light skin and moisturizing feel

A glass bowl filled with golden coconut oil, with a cinnamon stick resting inside. Next to the bowl is a halved coconut showing its white flesh and brown husk, along with several small, white, flaked pieces of coconut.

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Gransperse CU

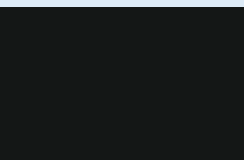
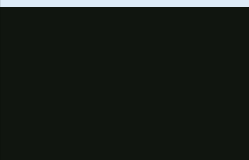
	INCI	Pigment %	
Gransperse White CU-65	Titanium Dioxide (and) Coco-Caprylate/Caprate (and) Polyglyceryl-6 Polyricinoleate (and) Polyhydroxystearic Acid (and) Dilinoleic Acid/Butanediol Copolymer (and) Castor Oil/IPDI Copolymer	63-67%	
Gransperse Yellow CU-51	Iron Oxides (CI 77492) (and) Coco-Caprylate/Caprate (and) Polyglyceryl-6 Polyricinoleate (and) Polyhydroxystearic Acid (and) Dilinoleic Acid/Butanediol Copolymer (and) Castor Oil/IPDI Copolymer	49-53%	
Gransperse Red CU-57	Iron Oxides (CI 77491) (and) Coco-Caprylate/Caprate (and) Polyglyceryl-6 Polyricinoleate (and) Polyhydroxystearic Acid (and) Dilinoleic Acid/Butanediol Copolymer (and) Castor Oil/IPDI Copolymer	55-59%	
Gransperse Black CU-65	Iron Oxides (CI 77499) (and) Coco-Caprylate/Caprate (and) Polyglyceryl-6 Polyricinoleate (and) Polyhydroxystearic Acid (and) Dilinoleic Acid/Butanediol Copolymer (and) Castor Oil/IPDI Copolymer	63-67%	

Gransperse CDS

	INCI	Pigment %	
Gransperse White CDS-65	Titanium Dioxide (and) Coco-Caprylate/Caprate (and) Polyglyceryl-6 Polyricinoleate (and) Polyhydroxystearic Acid (and) Dilinoleic Acid/Butanediol Copolymer (and) Disodium Stearoyl Glutamate (and) Castor Oil/IPDI Copolymer	61-65%	
Gransperse Yellow CDS-51	Iron Oxides (CI 77492) (and) Coco-Caprylate/Caprate (and) Polyglyceryl-6 Polyricinoleate (and) Polyhydroxystearic Acid (and) Dilinoleic Acid/Butanediol Copolymer (and) Disodium Stearoyl Glutamate (and) Castor Oil/IPDI Copolymer	48-52%	
Gransperse Red CDS-57	Iron Oxides (CI 77491) (and) Coco-Caprylate/Caprate (and) Polyglyceryl-6 Polyricinoleate (and) Polyhydroxystearic Acid (and) Dilinoleic Acid/Butanediol Copolymer (and) Disodium Stearoyl Glutamate (and) Castor Oil/IPDI Copolymer	53-57%	
Gransperse Black CDS-65	Iron Oxides (CI 77499) (and) Coco-Caprylate/Caprate (and) Polyglyceryl-6 Polyricinoleate (and) Polyhydroxystearic Acid (and) Dilinoleic Acid/Butanediol Copolymer (and) Disodium Stearoyl Glutamate (and) Castor Oil/IPDI Copolymer	61-65%	

Color Strength



		Gransperse White CDS-65 = 74% of Gransperse White CU-65
		Gransperse Yellow CDS-51 = 88% of Gransperse Yellow CU-51
		Gransperse Red CDS-57 = 98% of Gransperse Red CU-57
		Gransperse Black CDS-65 = 99% of Gransperse Black CU-65
Gransperse CDS	Gransperse CU	

- Overall, Gransperse CU has greater color strength than Gransperse CDS



Gransperse Applicability



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Gransperse CDS



Gransperse CU

Porcelain

Rose Ivory

Cream Beige

Amber Beige

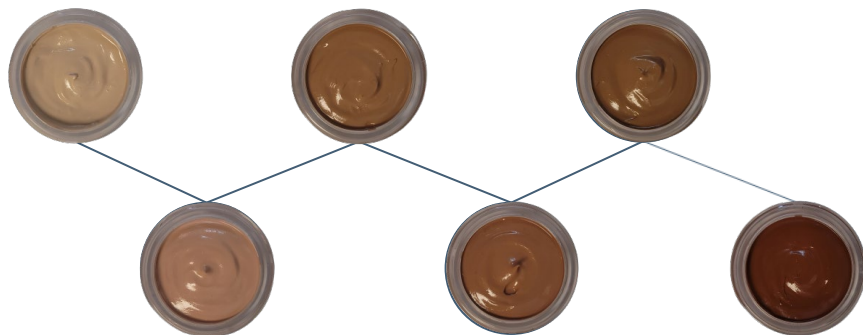
Caramel

Mahogany

Shade Opportunities

Formula Application

W: 92.70% Y: 6.00% R: 1.20% B: 0.10%	W: 69.90% Y: 20.30% R: 6.20% B: 3.60%	W: 46.90% Y: 39.70% R: 7.60% B: 5.80%
Porcelain	Cream Beige	Caramel



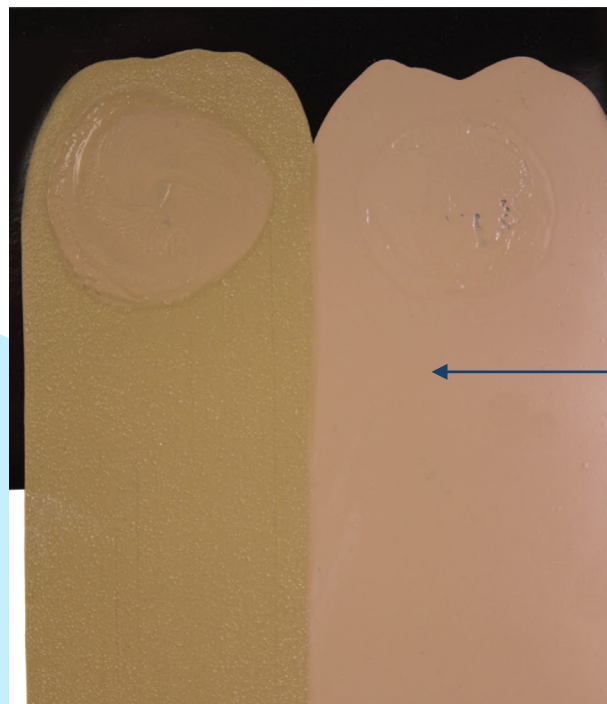
W: 91.40% Y: 5.50% R: 2.60% B: 0.50%	W: 64.30% Y: 22.80% R: 8.85% B: 4.05%	W: 0.00% Y: 52.85% R: 29.70% B: 17.45%
Rose Ivory	Amber Beige	Mahogany

Product: **SKINIMALIST CLEAN & SIMPLE ABC FOUNDATION**

Formula Code: **G105-466.01**

Phase	Ingredients	INCI	%
A	OCTYLDODECANOL	Octyldodecanol	11.000
	ALCOLEC BS	Lecithin	1.000
	GRANSENSE TC-8X	Coco-Caprylate/Caprate & Triheptanoin & C9-12 Alkane & Polyurethane-100	7.000
	GRANSURF PG-14	Polyglyceryl-6 Polyricinoleate & Polyglyceryl-10 Dioleate	7.000
	FLUIDANOV 20X	Octyldodecanol & Octyldodecyl Xyloside	1.000
	COVI-OX T-90 EU C	Tocopherol	1.200
	CETIOL LC	Coco-Caprylate/Caprate	6.500
	BENTONE GEL EUG V	Octyldodecanol & Distearidimonium Hectorite & Propylene Carbonate	3.000
	GRANSERSE WHITE	-	-
	GRANSERSE YELLOW	-	-
	GRANSERSE RED	-	-
	GRANSERSE BLACK	-	-
	GRANPOWDER BBP-700	Saccharomyces Ferment & Lauroyl Lysine	3.000
	MEARLMICA CF	Mica	4.000
B	DEIONIZED WATER	Water	29.600
	BENTONE HYDROCLAY 2000	Hectorite	2.000
	GLYCERIN	Glycerin	6.000
	EUXYL PE 9010	Phenoxyethanol & Ethylhexylglycerin	1.000
	SODIUM CHLORIDE	Sodium Chloride	0.700

Uniformity

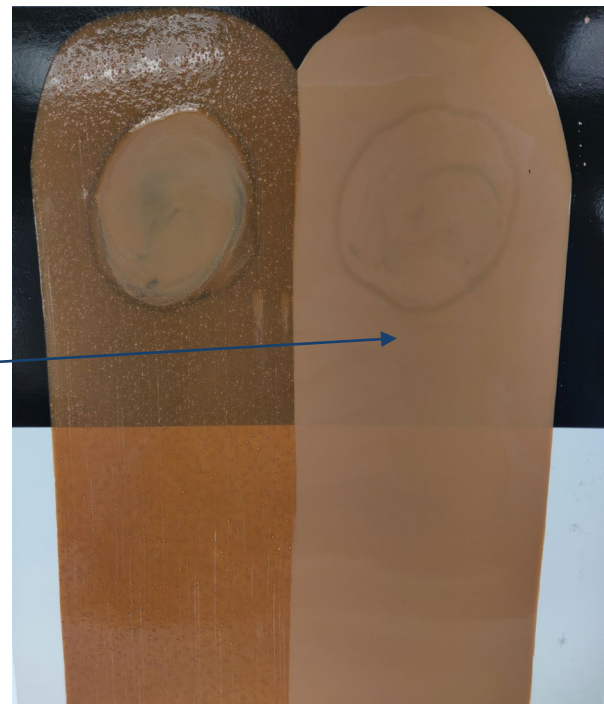


Comparable Treated
Powder Pigment
Coco-Caprylate/Caprate
Cream Beige

Gransperse CDS
Dispersion
Coco-Caprylate/Caprate
Cream Beige

Evaluation Method:
Combine standard ratios
of color and evaluate
drawdown

- Rub-off results show color uniformity with **dispersions**; mixture is **uniform, polished**
- Under same testing conditions, **powder shows streaking, graininess**, and desired color is achieved only after rubbing



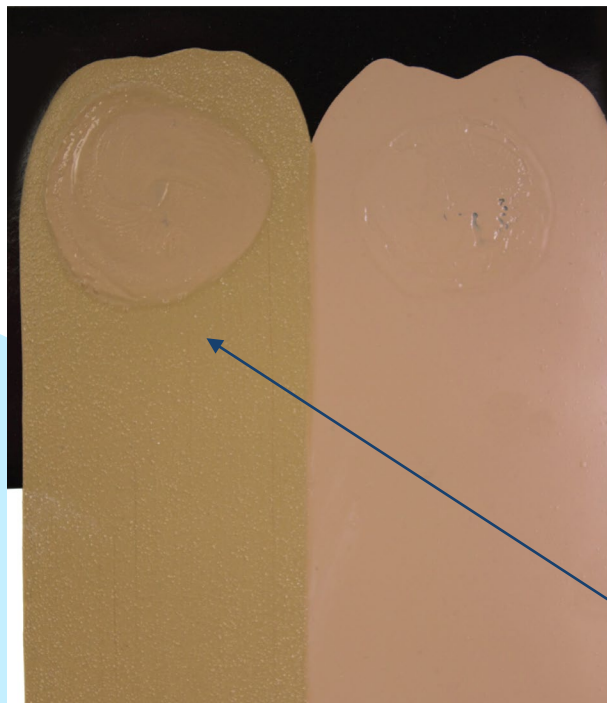
Comparable Untreated
Powder Pigment
Coco-Caprylate/Caprate
Cream Beige

Gransperse CU
Dispersion
Coco-Caprylate/Caprate
Cream Beige

Uniformity

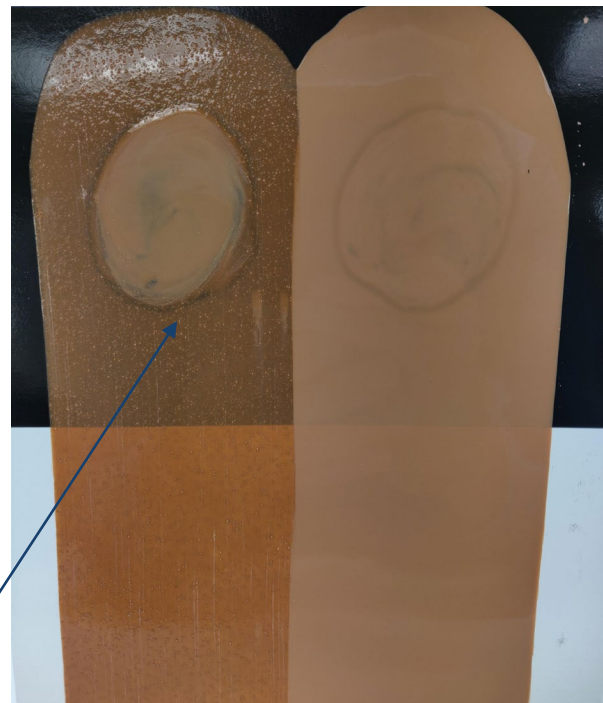
Evaluation Method:
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Comparable Treated
Powder Pigment
Coco-Caprylate/Caprate
Cream Beige

Gransperse CDS
Dispersion
Coco-Caprylate/Caprate
Cream Beige



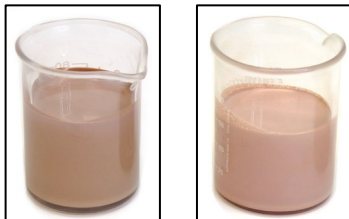
Comparable Untreated
Powder Pigment
Coco-Caprylate/Caprate
Cream Beige

Gransperse CU
Dispersion
Coco-Caprylate/Caprate
Cream Beige

Compatibility

Polarity ↑

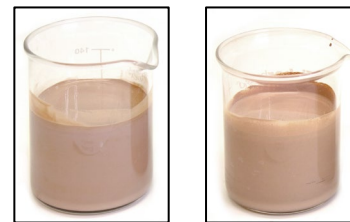
Triheptanoin



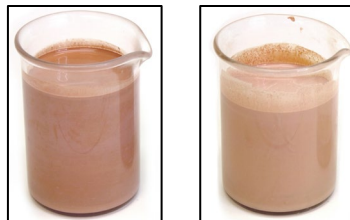
Macadamia Nut Oil



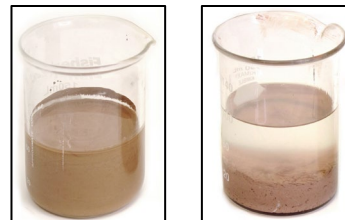
Caprylic/Capric Triglyceride



Coconut Alkanes



Dimethicone 5 cSt



Compatibility

With Triheptanoin



Gransperse CU



Comparable
Untreated Powder



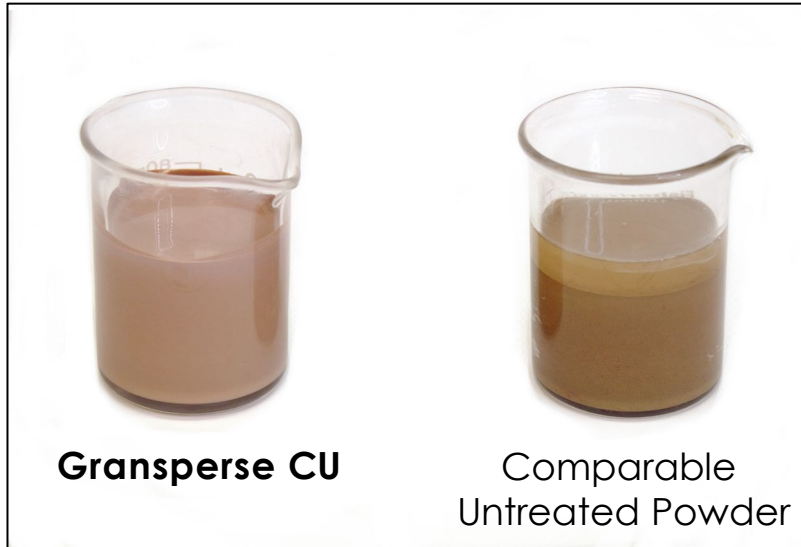
Gransperse CDS



Comparable
Treated Powder

Compatibility

With Triheptanoin



- With high polarity solvent Triheptanoin, **Gransperse CU** remains uniform throughout
- Untreated powder blend does not disperse
- Desired color not achieved, complete sedimentation

Compatibility

With Triheptanoin

- With high polarity solvent Triheptanoin, **Gransperse CDS** remains uniform throughout
- Powder pigment blend does not disperse, complete separation and color streaking



Gransperse CDS



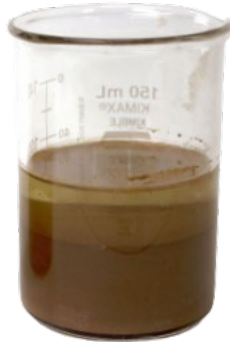
Comparable
Treated Powder

Compatibility

With Macadamia Nut Oil



Gransperse CU



Comparable
Untreated Powder



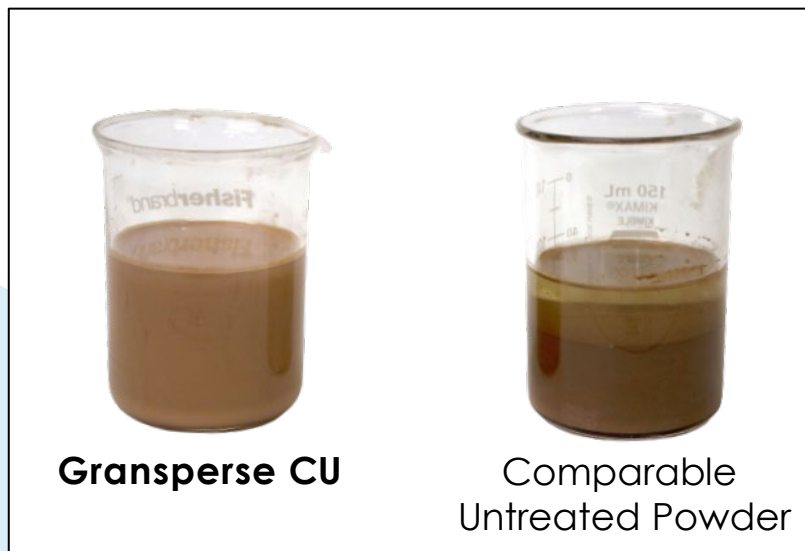
Gransperse CDS



Comparable
Treated Powder

Compatibility

With Macadamia Nut Oil



- With high polar Macadamia Nut Oil, **Gransperse CU** remains uniform throughout, color fully developed
- Untreated powder blend shows complete separation, desired color not achieved

Compatibility

With Macadamia Nut Oil

- **Gransperse CDS** is well dispersed, ready to use, with minimal mixing
- Under same conditions, powder pigment blend does not disperse
 - Complete sedimentation, undesirable color



Gransperse CDS



Comparable
Treated Powder

Compatibility

With Caprylic/Capric Triglyceride



Gransperse CU



Comparable
Untreated Powder



Gransperse CDS



Comparable
Treated Powder

Compatibility

With Caprylic/Capric Triglyceride



Gransperse CU



Comparable
Untreated Powder

- **Gransperse CU** is well dispersed in medium-high polar Caprylic/Capric Triglyceride
- Untreated pigment blend shows drastic separation, needs additional wetting agents and emulsifiers

Compatibility

With Caprylic/Capric Triglyceride

- **Gransperse CDS** is well dispersed, uniform color, ready to use
- Powder pigment blend shows separation, sedimentation, color streaking
- Demonstrates performance differences due to pigment coating



Gransperse CDS



Comparable
Treated Powder

Compatibility

With Coconut Alkanes (Vegelight 1214LC)



Gransperse CU



Comparable
Untreated Powder



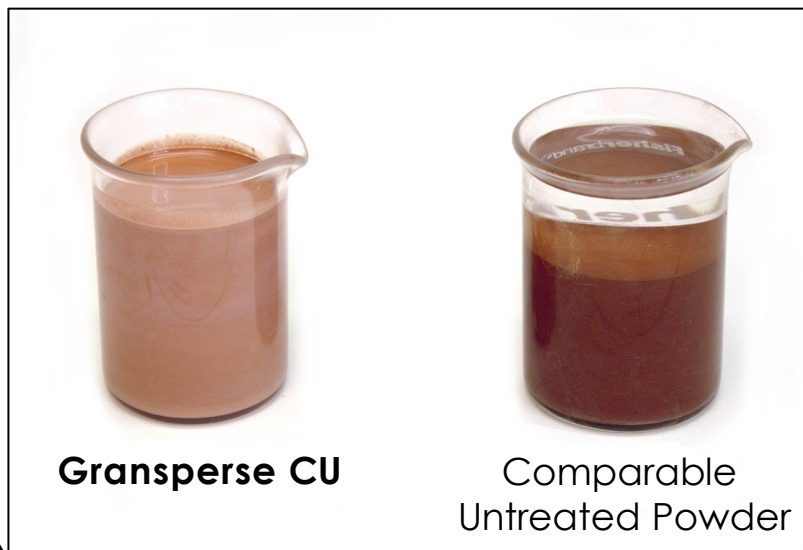
Gransperse CDS



Comparable
Treated Powder

Compatibility

With Coconut Alkanes (Vegelight 1214LC)

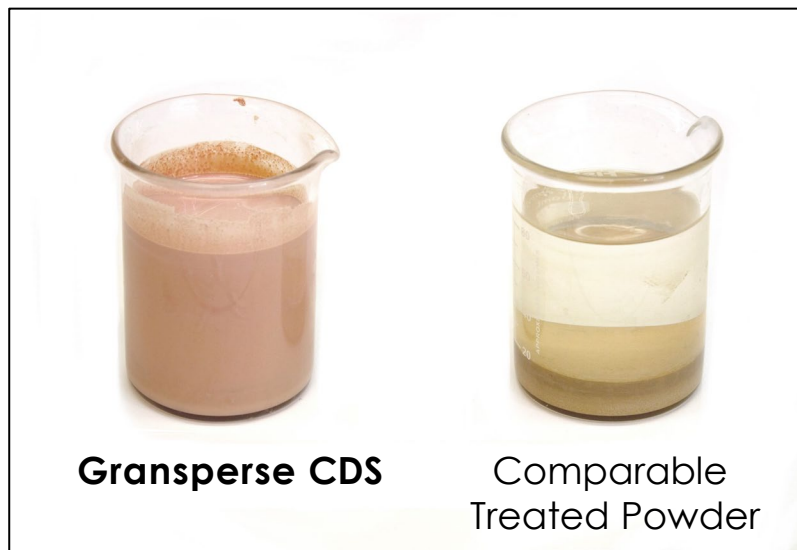


- **Gransperse CU** is well dispersed, some color streaking due to solvent polarity differences
- Untreated powder pigment blend complete separation, color is not developed

Compatibility

With Coconut Alkanes (Vegelight 1214LC)

- **Gransperse CDS** is uniform throughout chosen solvent, ready to use, despite non-polar hydrocarbon
- Treated powder blend is completely separated, color is not developed



Compatibility

With Dimethicone 5 cSt



Gransperse CU



Comparable
Untreated Powder



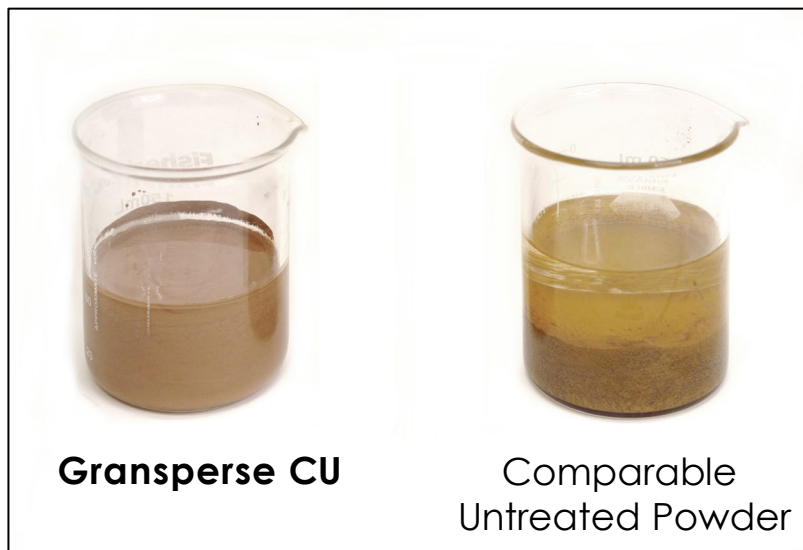
Gransperse CDS



Comparable
Treated Powder

Compatibility

With Dimethicone 5 cSt



- **Gransperse CU** is uniformly dispersed, no separation
- Color not fully developed, but consider low polar Coco-Caprylate/Caprate with silicone fluid Dimethicone
- Untreated powder has complete separation, not compatible

Compatibility

With Dimethicone 5 cSt

- **Gransperse CDS** has color development, but separation due to solvent choice
- Treated powder has better compatibility to silicone fluid, but color not developed, some degree of separation

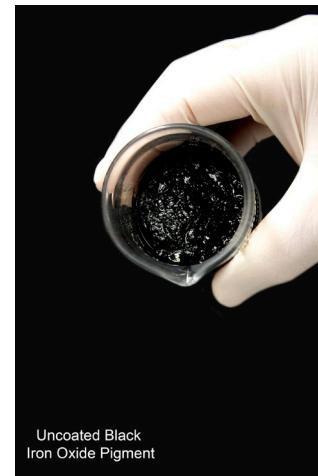
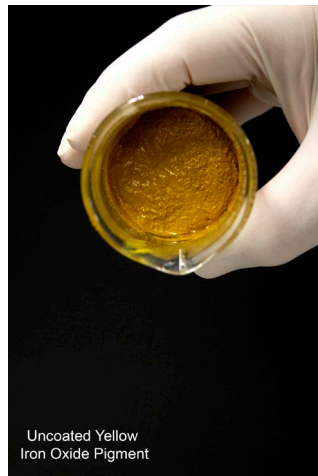


Gransperse CDS



Comparable
Treated Powder

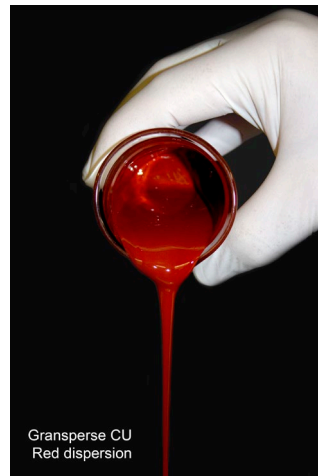
Shear Thinning / Pourability



Evaluation Method:

- 1) Combine untreated TiO₂ and Iron Oxides in corresponding pigment percentage comparable to **Gransperse CU** in Coco-Caprylate/Caprate.
- 2) Compare results to **Gransperse CU**.

Shear Thinning / Pourability



Evaluation Method:

- 1) Combine untreated TiO_2 and Iron Oxides in corresponding pigment percentage comparable to **Gransperse CU** in Coco-Caprylate/Caprate.
- 2) Compare results to **Gransperse CU**.

Formulation Suggestions

- Add directly to oil phase of formulations
- Recommended for W/O, O/W and anhydrous applications
- Foundations, Concealers, Lipsticks, Tinted Applications (BB, CC, Sunscreen)
- Compatible with high and low polarity esters as well as natural oils
- No high shear required for color development

In summary, Gransperse is:

- A **unique Grant Technology** for formulators looking for a color solution
- Widely compatible natural solvent - Coco-Caprylate/Caprate
- Exclusive **Gransense**, 100% Bio-based, Bio-degradable elastomer
 - Provides enhanced spreadability
 - Additional suspension
 - Light skin feel
- Ease of processing (safe, pourable)
- Cost-savings (wetting agents, time & energy)

Thank you for your time

Do you have any questions?



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