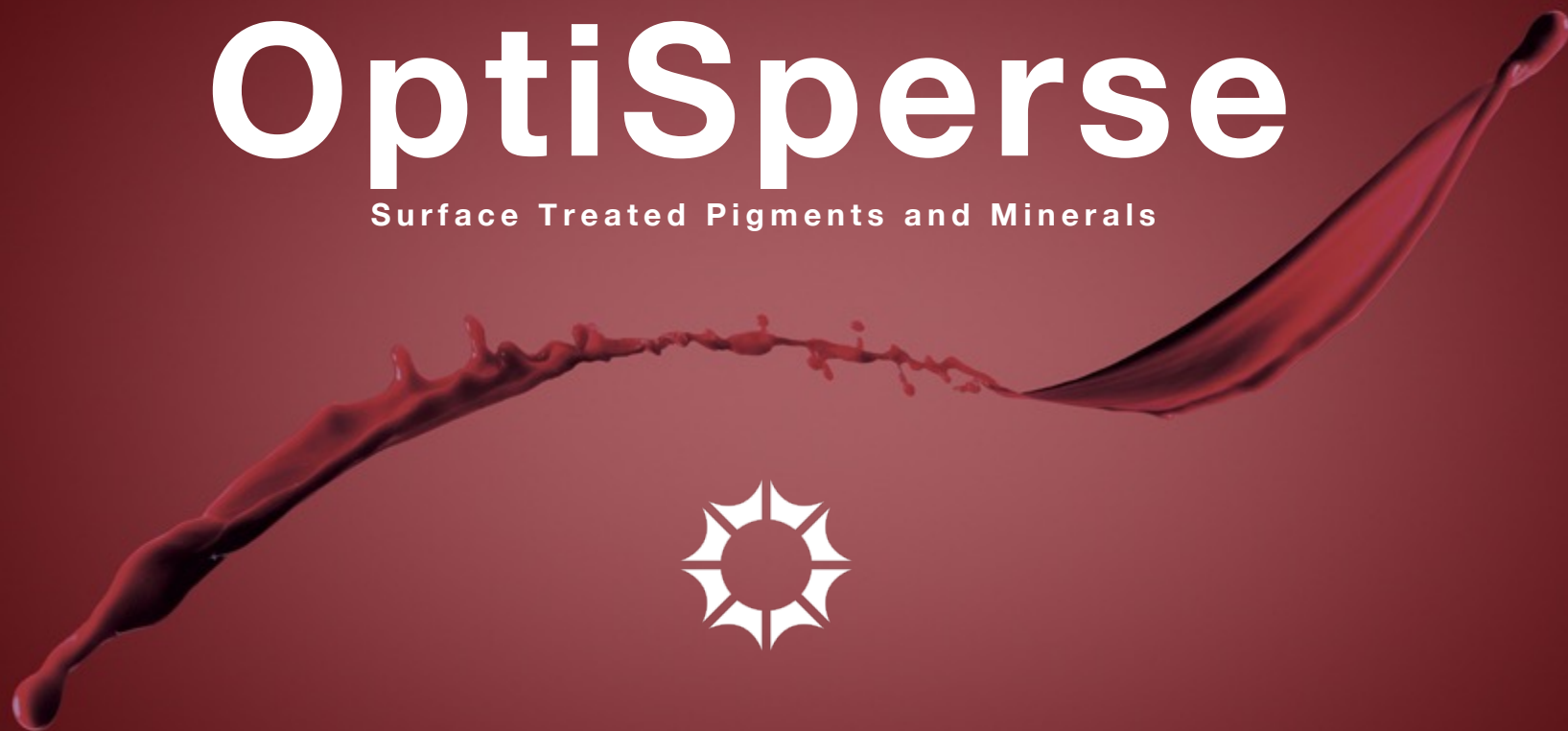


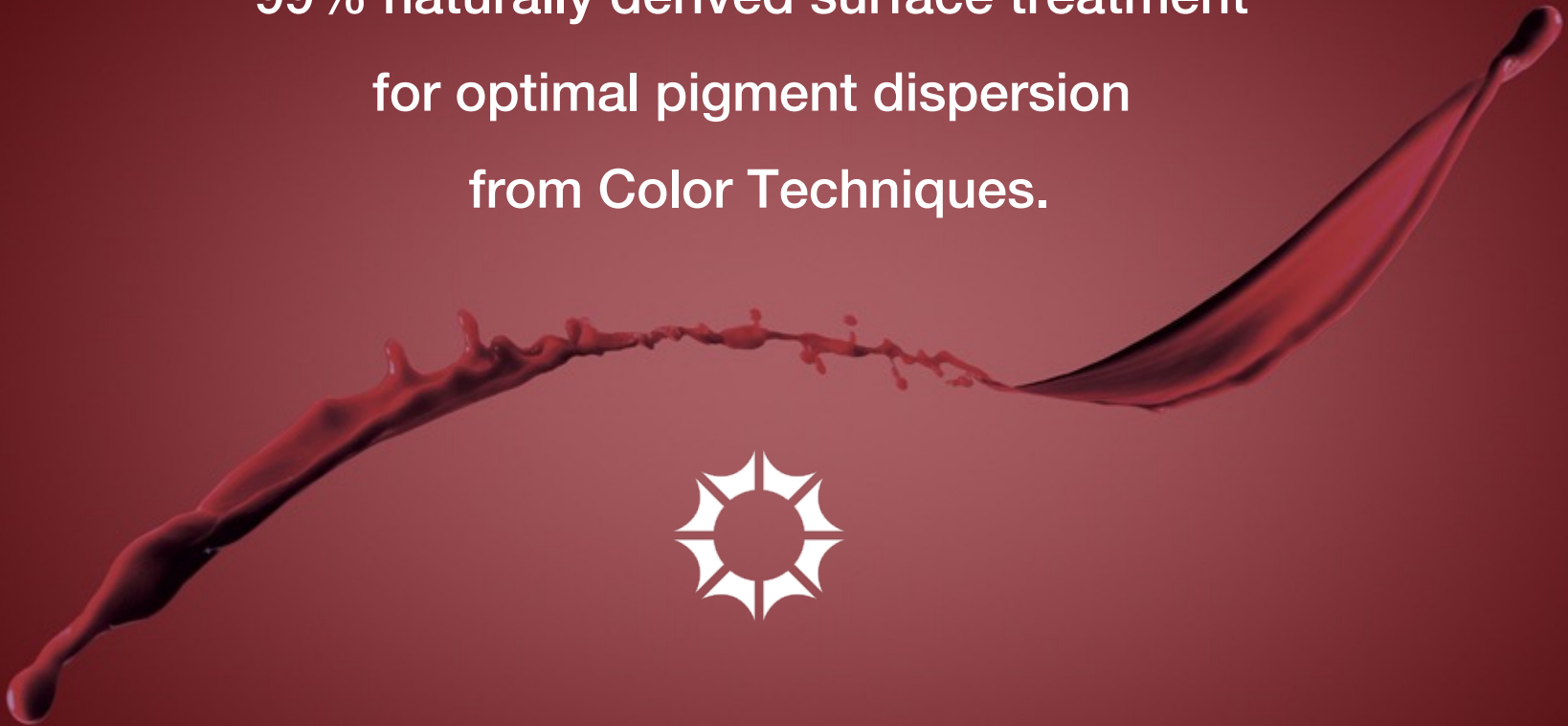
INTRODUCING

OptiSpense

Surface Treated Pigments and Minerals



OptiSperse is an innovative,
99% naturally derived surface treatment
for optimal pigment dispersion
from Color Techniques.

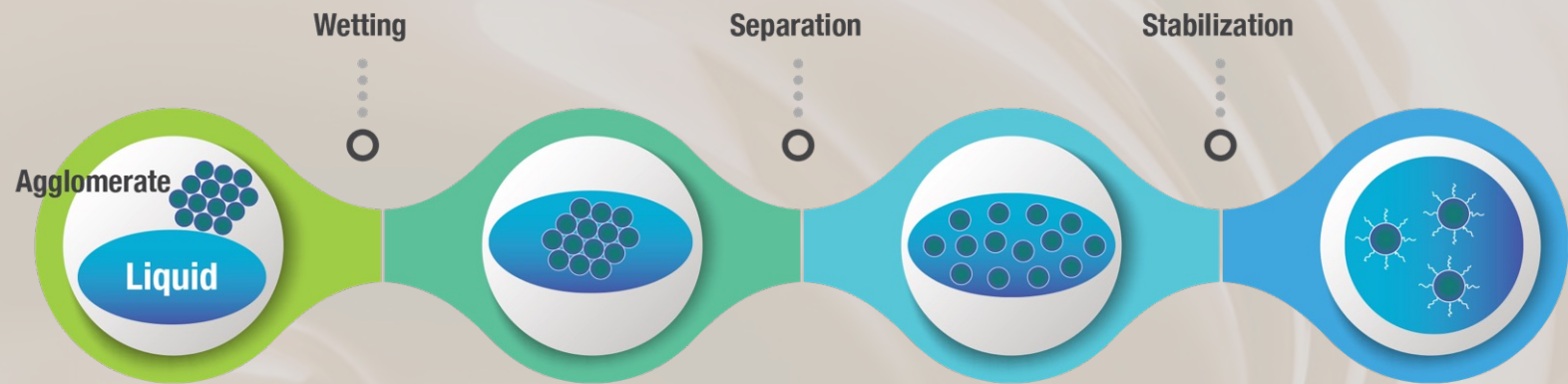


A Unique Solution

The OptiSpurse surface treatment allows formulators to easily disperse pigments into oils and other nonpolar solvents at very high loading concentrations while maintaining low viscosities for easy processing.



How OptiSperse Works

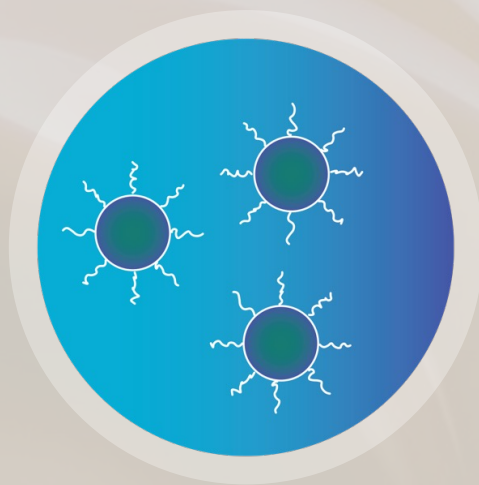


OptiSperse Dispersion Mechanism

The OptiSperse surface treatment is engineered to bond via the silane moiety and adsorb very quickly via the polymer tail to the pigment's surface. This creates a hydrophobic-lipophilic barrier around the particles, thus acting as molecular springs to prevent re-aggregation through steric hindrance stabilization.



Steric Hindrance Stabilization



Steric hindrance stabilization describes how a molecule's physical structure can affect its ability to react. When molecular-level particles are bulky, that can slow down or even prevent another particle from efficiently finding the desired site or positioning.

By coating the pigment with OptiSpurse, electrostatic forces prevent the particles from re-agglomerating, keeping them separate and stabilized.



Performance Comparison Chart

OptiSpense creates an optimal hydrophobic-lipophilic barrier.

	Hydrophilicity	Hydrophobicity	Lipophilicity
Galactoarabinan	✓✓✓		
Silicone		✓✓✓	✓✓
OptiSpense		✓✓✓	✓✓✓



OptiSperse Dispersion Attributes

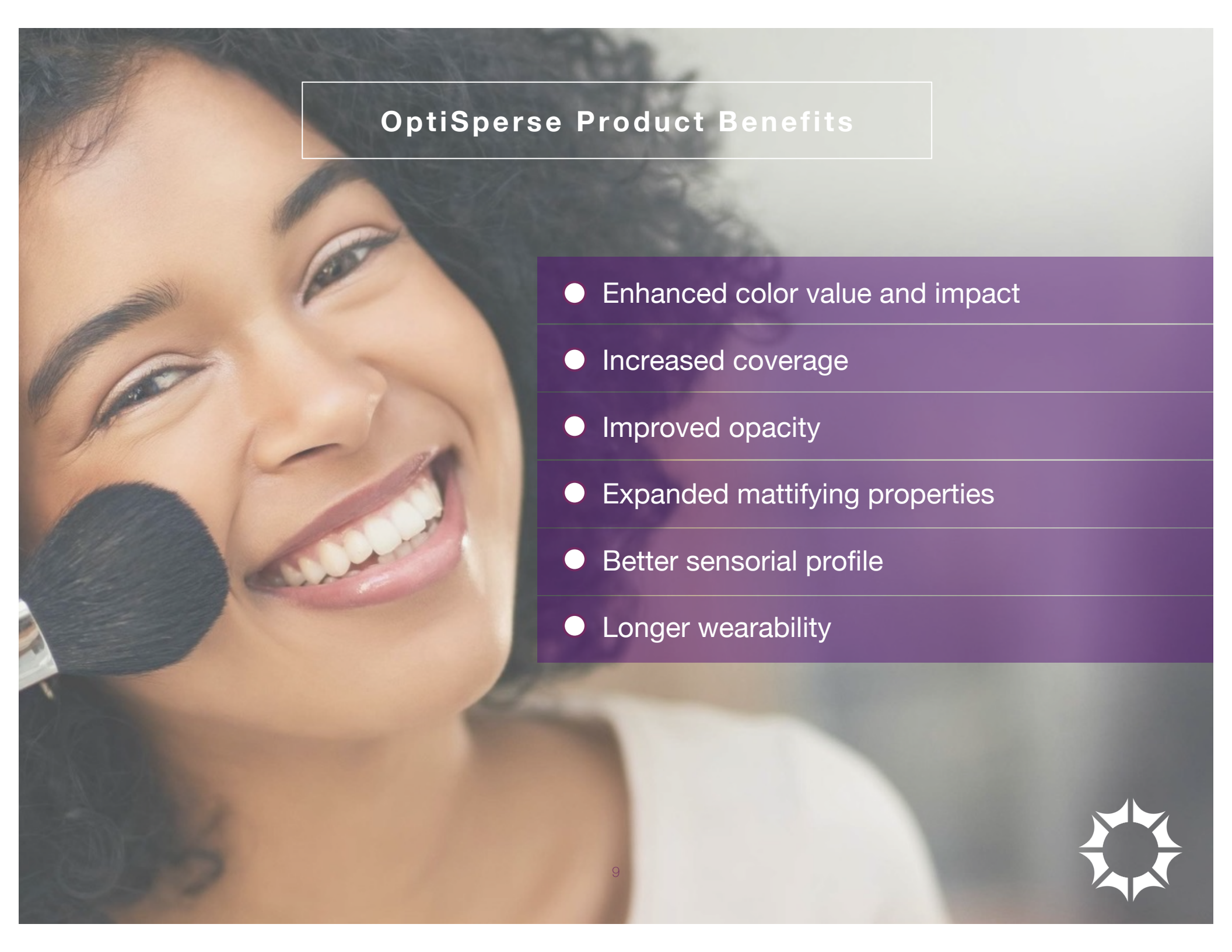
- Compatible with oils, esters, hydrocarbons and most silicones
- Produces fine, uniform, low viscosity dispersions
- Provides optimum color value and strength in dispersions and applications
- Minimal energy required using a Cowles Dispersator, propeller mixer or homogenizer, making high-energy dispersing equipment unnecessary



OptiSpense Production Benefits

- Easier batch processing
- Faster batch turnaround time
- Lower energy costs
- Efficient line filling operation
- Reduced carbon footprint





OptiSperse Product Benefits

- Enhanced color value and impact
- Increased coverage
- Improved opacity
- Expanded mattifying properties
- Better sensorial profile
- Longer wearability

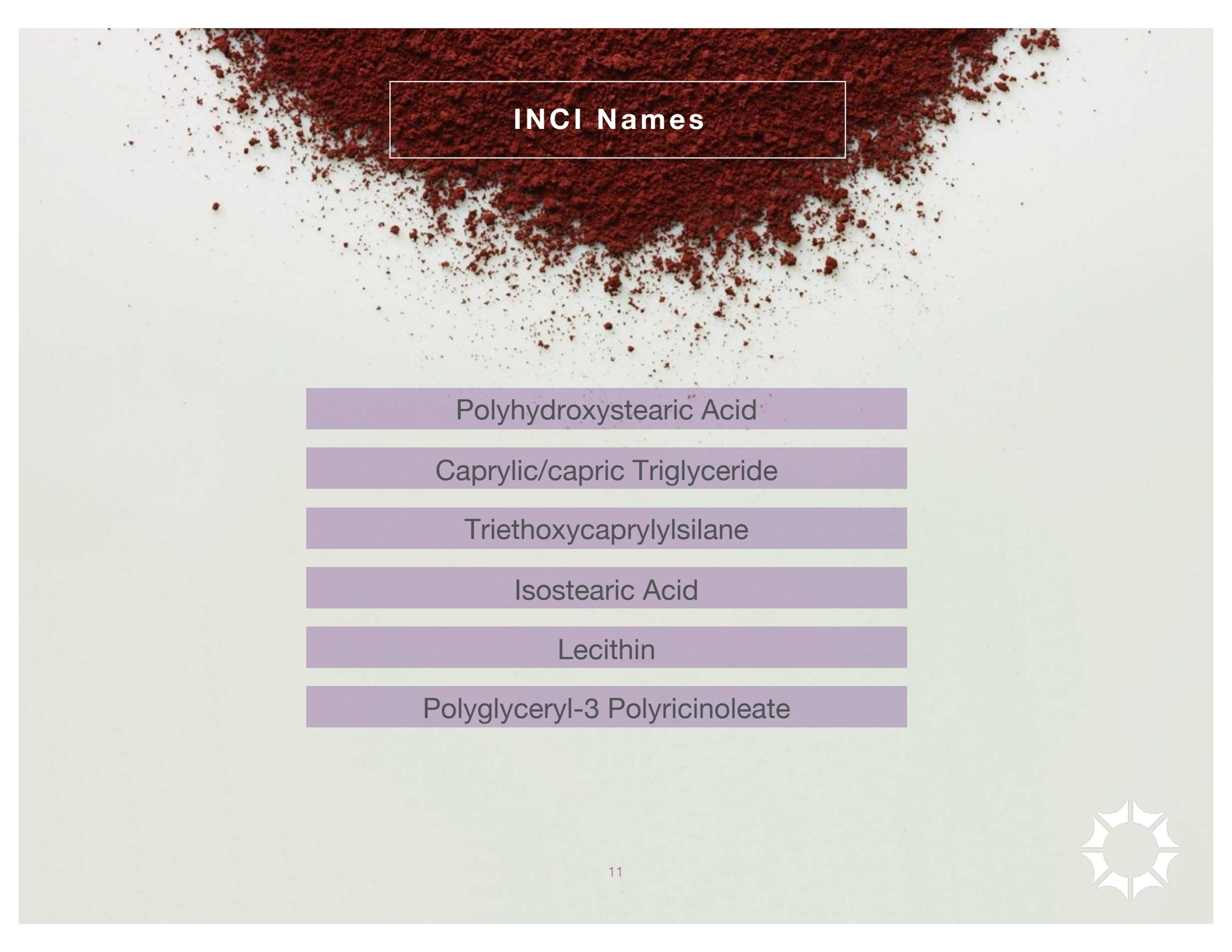


Areas of Application

OptiSpurse pigments are an excellent choice for these formulations and more:

- Mascaras and Liquid Eyeliners
- Eye and Brow Pencils
- Liquid Foundations
- Loose and Pressed Powders
- Root Touch-Ups for Hair
- Lip Products



A background image of a white surface with a large, irregular pile of fine red powder at the top. A white rectangular box with a thin black border is centered over the powder.

INCI Names

Polyhydroxystearic Acid

Caprylic/capric Triglyceride

Triethoxycaprylylsilane

Isostearic Acid

Lecithin

Polyglyceryl-3 Polyricinoleate



A large pile of fine, reddish-brown powder, likely iron oxide, is shown at the top of the slide. The powder is spread out, with some clumps and a generally uneven texture. It is set against a plain, light-colored background.

OptiSperse Globally Compliant Product Line

ROD-3065 OptiSperse White Sericite

ROD-3126 OptiSperse Red Iron Oxide

ROD-3131 OptiSperse Yellow Iron Oxide

ROD-3146 OptiSperse Black Iron Oxide

ROD-3817 OptiSperse Titanium Dioxide



OptiSperse Skin Perfecting Loose Face Powder

A loose face powder that applies smoothly and evenly, hiding skin imperfections with exceptional wearability.

Ingredient	INCI Name	Supplier	% w/w
Phase 1			
ROD-3065 OptiSperse White Sericite	Mica & Caprylic/Capric Triglyceride & Polyhydroxystearic Acid & Triethoxycaprylylsilane & Isostearic Acid & Polyglyceryl-3 Polyricinoleate & Lecithin	Color Techniques Inc.	95.85
Phase 2			
ROD-3817 OptiSperse Titanium Dioxide	Titanium Dioxide & Caprylic/Capric Triglyceride & Polyhydroxystearic Acid & Triethoxycaprylylsilane & Isostearic Acid & Polyglyceryl-3 Polyricinoleate & Lecithin	Color Techniques Inc.	1.70
ROD-3126 OptiSperse Red Iron Oxide	Iron Oxide & Caprylic/Capric Triglyceride & Polyhydroxystearic Acid & Triethoxycaprylylsilane & Isostearic Acid & Polyglyceryl-3 Polyricinoleate & Lecithin	Color Techniques Inc.	0.85
ROD-3131 OptiSperse Yellow Iron Oxide	Iron Oxide & Caprylic/Capric Triglyceride & Polyhydroxystearic Acid & Triethoxycaprylylsilane & Isostearic Acid & Polyglyceryl-3 Polyricinoleate & Lecithin	Color Techniques Inc.	0.90
ROD-3146 OptiSperse Black Iron Oxide	Iron Oxide & Caprylic/Capric Triglyceride & Polyhydroxystearic Acid & Triethoxycaprylylsilane & Isostearic Acid & Polyglyceryl-3 Polyricinoleate & Lecithin	Color Techniques Inc.	0.20
Phase 3			
Jeecide CAP-2	Caprylyl Glycol & Phenoxyethanol & Hexylene Glycol	Jeen International	0.50

Lab Manufacturing Procedure:

Load Phase 1, OptiSperse White Sericite, in a suitable Osterizer blender.

Add the OptiSperse pigments of phase 2. Blend for 1 minute.

Add ingredient of phase 3.

Blend for 2 min., Scrape, Repeat (2 x 1 minute). Discharge and check hydrophobicity.

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