

**Zenitech products recommended for:**  
 (other Zenitech products can be used in these applications)

**HAIR CARE**

- Zenigloss
- Zenigloss Q
- Zenicone XQ
- Zenicone XX
- Zenester S
- Zenester ME

**SKIN AND SUN**

- Zenibee Cream
- All Butters
- Zenigloss
- Zenigloss UPH
- Zenicone XX
- Zenicone XQ

**COLOR**

- Zenibee Cream
- Zenigloss S
- Zenigloss UP
- Zenigloss UPH
- All Butters

**OTHER CHOICES**

Zenigloss SE • Zenigloss Q-SE • Zeniberry C-XX • Olive Butter • Strawberry Butter  
 • Orange Butter • Avocado Butter • Lime Butter • Meadowfoam Butter

NON-IONIC PRODUCTS			CATIONIC PRODUCTS		
WATER SOLUBLE	WATER INSOLUBLE	WATER DISPERSIBLE	WATER SOLUBLE	WATER INSOLUBLE	WATER DISPERSIBLE
Zenester S	Zenibee Cream	Zenester ME	Zenicone XQ	Zenigloss Q	Zenester Q
Zenicone XX	Zenigloss	Zenester D	Zeniberry R-XQ		Zenigloss Q-SE
Zenicone IX	Zenigloss S	Zenigloss SE			
Zeniberry R-XX	Zenigloss UP				
	Zenigloss UPH				
	Zenibutters				



For a distributor near you visit our website:  
[www.zenitech.com](http://www.zenitech.com) or call 203 698 0429



©2007 ZENITECH, INC.

# ZENITECH<sup>®</sup>

A FULL SPECTRUM OF VERSATILE OPTIONS



**COLOR**



## Collected Data

### WETTING AND DISPERSION

In color cosmetics, pigments and fillers represent an additional phase that influences the integrity and performance of the final cosmetic. Wetting and dispersion are necessary steps in the manufacture of all pigmented products. Wetting is the spreading of a liquid over the surface of a solid, displacing air, and is influenced by the physical properties of both solid and liquid. Once particles are wet, dispersion can begin. Dispersion is the reduction of pigment and filler agglomerates, and their homogenous distribution throughout a vehicle by mechanical means. As supplied, most pigments are highly agglomerated, requiring some type of high shear agitation to become adequately dispersed.

A simple method to compare wetting efficiency of liquids of similar viscosity is to measure viscosity of slurries made from the liquids of interest. The lower the viscosity of a pigment slurry in similar viscosity oils, the better the wetting.

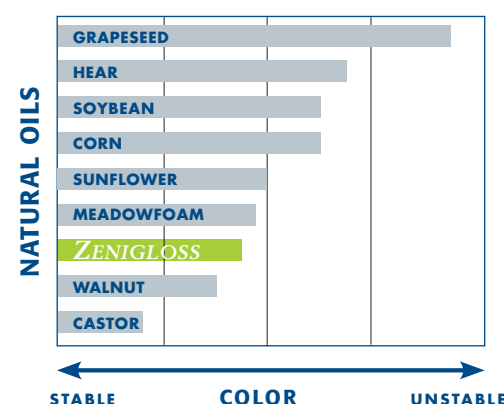
#### Comparison of Pigment Wetting Capability via Suspension Viscosity (Oils at 35% mica suspensions)

Light Oils	Neat Viscosity	Mica Suspension Viscosity	Conclusion
Isopropyl Myristate	5.7 cps	21,500 cps	IPM is a Good Solvent but a Poor Wetter of Inorganic Pigment
Isostearyl Neopentanoate	14.2 cps	600 cps	Good Wetting
Ethyl Hexyl Palmitate	9.0 cps	2,500 cps	Fair to Good Wetting
Cetearyl Ethyl Hexanoate	10.1 cps	3,300 cps	Poor Wetting

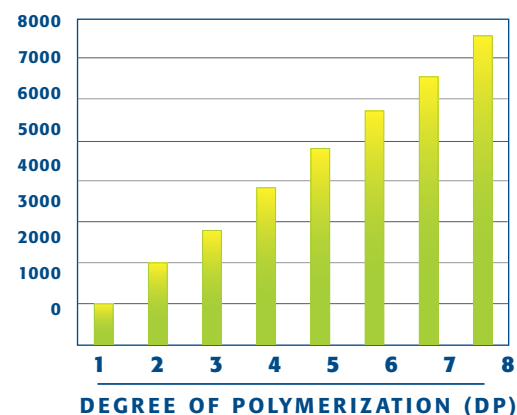
#### Castor Oil vs. Zenigloss(20% mica slurry)

Oil	Neat Viscosity	Mica Suspension Viscosity
Castor Oil	780 cps	3,760 cps
Zenigloss	1,360 cps	3,600 cps
<b>Conclusion</b>	<b>Zenigloss Wets Inorganic Pigments Better Than Castor Oil</b>	

#### OXIDATIVE STABILITY



#### MOLECULAR WEIGHT



#### STRICTEST TESTING\*

**Repeat Insult Patch Tests** (2 separate tests) using occlusive patches, test for any signs of irritation, burning or stinging, and for any sensitization to human skin

**Ames Salmonella Test** to show genotoxicity

**EpiOcular In Vitro Toxicity Test** for indication of eye and skin irritation

\*We do not test on animals.



## Product Overview

**ZENIGLOSS®** (inci name: castor isostearate succinate) A viscous oil of vegetable origin which provides adhesion and shine in lip glosses and lipsticks. Imparts higher luster and reduced tendency to run or smear. Being a polymer, Zenigloss is more viscous than castor oil, but actually produces grinds and dispersions of lower viscosity, indicating improved pigment-wetting properties. That translates to smoother application, better stick integrity, and better mass tone/write-off correlation. Zenigloss is an excellent solvent and plasticizer for both vegetable and mineral waxes commonly used in lip products. Produces sticks with fine, homogenous wax structure resistant to syneresis (sweating) and breakage.

Use Level 2–20%

**ZENIGLOSS S®** (inci name: castor isostearate beeswax succinate) A vegetable-derived material that exhibits good compatibility with a wide range of cosmetic ingredients. Zenigloss S is a unique, translucent soft solid at room temperature, with acceptable taste and odor properties. Because it provides gloss without melting, products formulated with Zenigloss S exhibit shine without increased tendency to run, feather, or bleed. Improves lipstick application by aiding pigment-wetting and contributing a creamy, emollient texture.

Use Levels: 5–30%

**ZENIGLOSS UP®** (inci name: castor isostearate succinate) A natural polymer of vegetable origin for use in decorative cosmetics that require reduced odor and taste. Exceptionally high viscosity and molecular weight (5700) contribute to improved adhesion and gloss. Unlike products of petroleum origin, Zenigloss UP is compatible with the vegetable waxes commonly used in lipsticks and polar oils. Introduced in the oil phase, it aids in producing strong, stable sticks with a homogeneous structure. Excellent wetting vehicle for both organic and inorganic pigments.

**ZENOLIN®** (inci name: castor isostearate succinate) A natural replacement for lanolin.

Use Level: 1–10%

**ZENIGLOSS UPH®** (inci name: castor isostearate succinate, hydrogenated castor) A gelled oil for both anhydrous products and emulsions. UPH gels the oil phase, for improved high-temperature stability in all anhydrous systems. UPH is a good pigment-wetter and increases viscosity to maintain pigment suspension. Excellent for lip glosses, providing exceptional tack and enabling chemists to formulate a softer product. Zenigloss UPH can be used as an oil-phase thickener, and as a stabilizer in water-in-oil emulsions. Provides cushion and pleasant after-feel in products for normal-to-dry skin. This vegetable-derived product can be used as an alternative to petrolatum.

**ZENOLATUM®** (inci name: castor isostearate succinate, hydrogenated castor) A natural replacement for petrolatum.

Use Level: 5–24% for lip products, 1–3% for emulsions

**ZENIBEE CREAM®** (inci name: octyldodecanol, beeswax) A soft emollient, with acceptable odor and taste properties that contributes body and cushion to lip products and emulsions. At a level of 5–10% in lipsticks, Zenibee Cream produces a creamy, emollient feel and excellent slip during application without compromising wear properties. Used at low (1–4%) levels in liquid or cream emulsion foundations for normal-to-dry or dry skin, Zenibee Cream contributes rich texture, good slip, playtime, and maintains an appealing sensation of cushion over the course of the day.

Use Level: 1–50%

**ZENITECH BUTTERS** Zenitech has developed Raspberry Butter®, Avocado Butter™, Carnauba Butter™ and Cranberry Butter® to provide formulators with more choice and expand the functionality of Zenibee Cream. Composed of octyldodecanol, beeswax and cold pressed natural oils that retain their antioxidant qualities, our butters offer unique characteristics and function in finished goods. Zenitech Butters provide a new dimension in stick products, foundations, and other applications.

