



## Emulsion-based Cheek Color

Phase	Ingredient	Wt, %
A	Deionized Water	62.00
	Zemea® Propanediol	8.00
	Stepanquat ML	2.00
	Germaben 11-E	1.00
B	SI-TECTMCM-040 Cyclomethicone	20.00
	Abil EM-90	1.00
	Salcare SC-95	2.00
	Phenoxyethanol	1.00
C	SI-TECTM CM-040 Cyclomethicone	1.80
	Titanium Dioxide 328	0.68
	D&C Red 30 (Puricolor Red VRE 1)	0.52

### Manufacturing Process

1. Combine Phase A in a suitable mixing vessel at room temperature. Mix until the Phase is clear and uniform.
2. Combine Phase B in a mixing vessel at room temperature.
3. Premix Phase C in a separate container and grind through a 3-roll mill until there are no pigment specks present.
4. Add Phase C to Phase B and mix until all the color is dispersed.
5. When Phases A and B are uniform, slowly add Phase A to combined Phases B and C and mix until all the phases are combined. Switch to a homogenizing mixer and mix for 10-15 minutes. Store the batch in airtight containers until ready for filling. Check the viscosity and pH of the batch.

### Benefits of Zemea® propanediol in Emulsion-based Cheek Color

- Excellent Stability
- Excellent Aesthetics

### For additional information or samples:

#### DuPont Tate & Lyle Bio Products Customer Service

198 Blair Bend Drive  
Loudon, TN 37774

Tel: +1-866-404-7933

[www.duponttateandlyle.com](http://www.duponttateandlyle.com)

