



# Zemea® liquid foundation with Vanatural® XGB

Phase	Trade/drug name	INCI name	Supplier	Wt.%
A	Water	—	—	77.97%
	Vanatural® XGB Bentonite Clay	Bentonite and xanthan gum	R.T. Vanderbilt Company, Inc.	4.00%
	<b>Zemea® propanediol</b>	<b>Propanediol</b>	<b>CovationBio PDO</b>	<b>5.00%</b>
B	Iron oxides and microcrystalline cellulose	C2-5 Yellow LLXLO	Kobo Products	0.40%
	Iron oxide (C.I. 77491) and cellulose	C2-5 Red R-516L		0.10%
	Iron oxide (C.I. 77499) and cellulose	C2-5 Black BL-100		0.03%
	Titanium dioxide and cellulose and alumina	C2-5 TiO2 CR-50		3.50%
	Mica and cellulose	C2-5 Sericite FSE		4.00%
C	Xyliance™	Cetearyl wheat straw glycosides and cetearyl alcohol	Actives International	5.00%
D	Preservative	—	—	q.s
Total				100.00%

Formulation prototype provided by: R.T. Vanderbilt Company, Norfolk, CT, USA

## Procedure

1. While heating the water to 75°C, slowly add the VANATURAL® XGB to the water agitated at maximum available shear.
2. Mix until it is fully hydrated and add the Zemea® propanediol.
3. Combine the phase B ingredients, then add to phase A and mix until smooth.
4. Maintain the water phase at 75°C.
5. Heat phase C oil phase to 75°C.
6. Add the oil phase to the water phase with good agitation; mix until uniform.
7. Avoid incorporating air.
8. Cool with mixing; add phase D when the emulsion is <30°C.