

**Vitamin Enriched Barrier Cream No. 490**

	<b>Wt. %</b>
<b>A</b>	<b>VEEGUM® Ultra</b> Magnesium Aluminum Silicate 0.80
	Carbomer (Carbopol® 934 <sup>1</sup> ) 0.30
	Water 79.00
<b>B</b>	Glycerin 2.00
	Butylene Glycol 2.00
<b>C</b>	Cetyl Alcohol 0.50
	Glyceryl Monostearate SE 2.00
	Caprylic/Capric Triglyceride (Neobee® M-5 <sup>2</sup> ) 2.00
	C12-15 Octanoate (Finester™ EH-25 <sup>3</sup> ) 2.00
	Castor Oil/IPDI Copolymer (Polyderm™ PPI CO <sup>4</sup> ) 1.00
	Phenyl Dimethicone (DC 556 Fluid <sup>5</sup> ) 3.00
	Dimethicone (XIAMETER® PMX-200 Silicone Fluid 350cs <sup>5</sup> ) 1.00
	Bois Oil 0.50
	Steareth-2 (Brij® S2 <sup>6</sup> ) 0.95
	Steareth-21 (Brij® S721 <sup>6</sup> ) 0.95
<b>D</b>	Panthenol 1.00
	Vitamin E Acetate 0.50
	Vitamin A Palmitate 0.50
	Triethanolamine (to pH 5.8 ± 0.3) q.s.
<b>E</b>	Preservative, Fragrance q.s.

**Procedure:** Begin heating the water to 80°C. Slowly add the **VEEGUM® Ultra** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the remaining water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 80°C. Blend the Part C oil phase ingredients and heat to 80°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing; add Part D and Part E ingredients when the emulsion is <35°C. Adjust as necessary to pH 5.8 ± 0.3.

**RAW MATERIAL SUPPLIERS**
<sup>1</sup>Lubrizol Advanced Materials Inc., Cleveland, OH

<sup>2</sup>Stepan Company, Northfield, IL

<sup>3</sup>Innospec Active Chemicals, Edison, NJ

<sup>4</sup>Alzo International Inc., Sayreville, NJ

<sup>5</sup>Dow Corning Corporation, Midland, MI

<sup>6</sup>Croda, Inc., Edison, NJ

**TRADEMARKS**
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Neobee is a registered trademark of Stepan Company.

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