_	Formula	tion –
Name	ULTRA FABRIC SOFTENER DISPERSION USING 22% SOLIDS STEPANTEX® SP-90	
No.	1133	
Description	This 22% solids, palm-derived fabric softener is for use in the rinse cycle of the wash load. It is non-yellowing and provides excellent softening and static control while maintaining the rewet properties of the fabric.	
Formulation	INGREDIENTS:	<u>% by Weight</u> Functionality
	Deionized Water STEPANTEX® SP-90 Calcium Chloride, 20% by wt. solution Preservative Dye, Fragrance, Other Ingredients	74.31 Carrier 24.44 Softener 1.25 Viscosity Adjuster q.s. Preservative q.s. Additives
	Total	100.00
Procedure	 Charge Deionized Water at 45°C/113°F or heat it up to this temperature in the vessel. Dye can be added at this time. Heat STEPANTEX® SP90 to 45°C/113°F. While mixing, slowly add the heated STEPANTEX® SP90 to the water and agitate for 10 minutes. The esterquat will disperse into a thick cream. Add Calcium Chloride solution to reduce viscosity and stabilize the system. Continue mixing for another 20 minutes. When the temperature has reached 35°C/95°F, charge Preservative, Fragrance, any Other Ingredients using amount recommended by supplier. 	
Physical Properties	Appearance at 25°C/77°F pH, as is Viscosity at 25°C/77°F, cps (Brookfield DV-II+ Pro) Solids, % Density, lbs/gal	Opaque liquid 2.69 Water-like 22.00 8.34
Storage/ Stability	4 weeks at 5°C/41°F 4 weeks at 40°C/104°F 4 weeks at 50°C/122°F	Stable Stable Stable
Instructions for Use	Use 1 oz. in rinse cycle for a regular wash load (4–6 lbs).	
External Comment	If mixture becomes too thick before all the quat is charged into the water (Step 2 of procedure) where the surface of the batch is not moving, add 1/3–1/2 of the calcium chloride needed to reduce its viscosity. Finish charging the quat, followed by the rest of the electrolyte. For a more viscous product, the calcium chloride amount can be reduced. Final viscosity may vary, depending upon the processing temperature, mixing rate, and time. Fragrance and other ingredients may also affect this parameter. Sodium chloride can also be used to adjust viscosity. Monitoring viscosity of the final fabric softener product at the storage temperature requirements is recommended. Marketing Notes: BCI = 81. Total Biorenewable Carbon Index (BCI) was calculated only for the	

