



Formulation

Name	FLUID FABRIC SOFTENER WITH 15% ACTIVE BASED ON STEPANQUAT® GA 90	
No.	1028	
Description	This fabric softener is for use in the rinse cycle of the wash load. It provides excellent softening and static control while maintaining the rewet properties of the fabric.	
Formulation	<u>INGREDIENTS:</u>	<u>% by Weight</u>
	Tap Water	82.4
	STEPANQUAT® GA 90	16.7
	Calcium Chloride (25% aqueous)	0.3
	Fragrance	0.6
	Dye	q.s.
	Total	100.0
Procedure	Load Tap Water (50°C) and Dye into the reactor. While stirring, add STEPANQUAT® GA 90 at 50°C (previously melted and mixed until homogeneous). Stir until the blend (Tap Water, Dye, and STEPANQUAT® GA 90) is homogeneous and has a white, shiny, and smooth appearance. Cool to 35°C while maintaining agitation. Add the Calcium Chloride solution. The blend becomes fluid instantaneously. Continue cooling to 30°C. Add Fragrance. Product is ready to be packaged.	
Physical Properties	Appearance at 25°C	Opaque liquid
	pH, as is	2.8 - 3.0
Storage/Stability	1 month at 50°C	stable
	2 months at 40°C	stable
Instructions for Use	Add 30 mL to the final rinse.	
External Comment	The viscosity is about 60mPa.s (viscometer Contraves TV2) and 120 mPa.s (Brookfield RVT M4/V100). The viscosity can be affected by the type and level of fragrance. Formulation is impacted by water hardness.	
Registered Trademarks of Stepan Company	STEPANQUAT®	
For Additional Assistance	For applications or product handling assistance, call our Technical Service Department at 1-800-745-7837 (U.S.) or 011-334-76-505-100 (Europe). For ordering assistance, call our Account Service Department at 1-800-457-7673. The information contained herein is based on the manufacturer's own study and the works of others and is subject to change without prior notice. The information is not intended to be all-inclusive, including as to the manner and conditions of use, handling, storage or disposal or other factors that may involve additional legal, environmental, safety or performance considerations. Nothing contained herein grants or extends a license, express or implied, in connection with any patents issued or pending of the manufacturer or others, or shall be construed as a recommendation to infringe any patents or to violate any applicable laws. STEPAN COMPANY MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, AND NO WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE, INCLUDING REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY, ACCURACY, COMPLETENESS, ADEQUACY OR OTHERWISE. Stepan Company (and its employees, subsidiaries and affiliates) shall not be liable (regardless of fault) to the vendee, its	

employees, or any other party in respect of this information, including in respect of its accuracy, completeness, adequacy, furnishing, use, or reliance upon, and the vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise.



Stepan Company
B.P. 127
38320 Voreppe, France
Telephone 011-334-76-505-100

Revision Date: 09/27/2017 Publication Date: 04/25/2007 © 2017, Stepan Company. All rights reserved.