Stepan 5		
Formulation		
Name	LOW-TEMPERATURE RINSE AID	
No.	1343	
Description	Rinse aids provide a sheeting action that reduces drying time and enhances shine on dishes. This liquid rinse aid formulation contains MAKON® NF-180, a de-foaming nonionic surfactant with excellent wetting properties, and citric acid which helps prevent calcium salt deposits left behind by hard water and food soils. These ingredients work together to leave your dishes, glassware, and utensils spot and film free.	
Formulation	INGREDIENTS:	% by Weight Functionality
	Deionized Water MAKON® NF-180 STEPANATE® SCS Citric acid, anhydrous Colorant and Preservative	q.s. to 100 Diluent 40.0 Wetting Agent, Cleansing Agent 10.0 Hydrotrope 5.0 Chelating Agent as needed
	Total	100.0
Procedure	 Add Deionized Water to the vessel. With agitation, incorporate STEPANATE® SCS. Add MAKON® NF-180 while mixing. Add Citric Acid and mix until homogeneous. Add Colorant and Preservative as needed. 	
Physical Properties	Appearance at 25℃ Cloud Point (as is), ℃ (℉) Cloud Point (1% by weight), ℃ (℉) Viscosity at 25℃, cps	Clear liquid 82 (180) 34 (93) <150
Storage/ Stability	10 Freeze/Thaw Cycles 3 weeks at 60 ℃ 4 weeks at 25 ℃ 4 weeks at 10 ℃ 3 weeks at -15 ℃	Pass Stable Stable Stable Stable
Instructions for Use	Meter into warewash machine, using and automated injector system that adds the product to the final rinse.	
External Comment	Marketing Notes: This formulation is free-from solvent and volatile organic components. It can be used in dish wash machines that operate at temperatures below 50 $^{\circ}$ C.	
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For	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).	

Additional Assistance

For ordering assistance, call our Account Service Department at 1-800-457-7673.

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