


Formulation

Name	STRUCTURED LIQUIDS TECHNOLOGY - ANTI-DANDRUFF SHAMPOO	
No.	1269	
Description	This shampoo utilizes Stepan's Structured Liquids Technology to suspend Zinc Pyrithione, an active that helps to treat dandruff by reducing visible flakes on the scalp. Naturally-derived* cleansers STEPANOL® AM-CIT/MIT and STEOL® CS-270 C gently wash away dirt and oils from the hair while STEPAN-MILD® GCC provides a soft, touchable feel. *The Stepan surfactants used in this formulation are greater than 50% BCI.	
Formulation	<u>INGREDIENTS:</u>	<u>% by Weight</u> <u>Functionality</u>
	=== Phase 1 === STEPAN-MILD® GCC NINOL® CAA	10.0 Structure Agent, Emollient 2.0 Surfactant
	=== Phase 2 === STEPANOL® AM-CIT/MIT STEOL® CS-270 C Fragrance	14.0 Surfactant 1.0 Surfactant 0.5 Fragrance
	=== Phase 3 === Deionized Water Zinc Pyrithione (ZPT), 48% Dispersion	q.s. to 100.0 Diluent 2.4 Active
	=== Phase 4 === Kathon™ CG (The Dow Chemical Company) Methylchloroisothiazolinone and Methylisothiazolinone Dye Citric Acid, 50% aqueous solution	0.05 Preservative q.s. Dye q.s. pH Adjuster
	Total	100.0
Procedure	<ol style="list-style-type: none"> 1. In a suitable vessel equipped with heating and agitation capabilities, charge NINOL® CAA and STEPAN-MILD® GCC with mixing at 45 °C (113 °F) mix until homogenous and avoid aeration. 2. Add STEPANOL® AM-CIT/MIT, STEOL® CS-270 C and Fragrance (if desired) with agitation. Mix until homogenous. Avoid aeration. 3. Add Deionized Water and Zinc Pyrithione to the batch under high shear mixing a homogenizer is recommended. Mix until homogeneous, avoid aeration. 4. Adjust pH with Citric Acid, 50% aqueous solution. 5. Add Kathon™ CG. 6. Add Dye as desired 	
Physical Properties	Appearance at 25 °C pH, as is, at 25 °C Viscosity at 25 °C (RVT A, 10 rpm, 60 sec), cps	Opaque viscous liquid 5 - 6 3,000 - 7,000
Storage/ Stability	4 weeks at 5 °C 4 weeks at 25 °C	Stable Stable

	4 weeks at 45 °C Freeze/Thaw 3 cycles	Stable Passes
Instructions for Use	For maximum dandruff control, use every time you shampoo. Wet hair, massage onto scalp and rinse. Repeat if desired.	
External Comment	Based on Stepan's in-house salon evaluation, this formulation met the performance of the market leader. Foam feel and foam volume were evaluated.	
Registered Trademarks of Stepan Company	Marketing Notes: This formulation is based on Stepan patented technology. This is a starting formulation only. No efficacy data will be provided by Stepan. Stepan has developed this formulation using Zinc Pyrithione at the level noted in the FDA Monograph. For external use only. Keep this and all drugs out of reach of children. If swallowed, get medical help or contact a Poison Control Center right away. Avoid contact with eyes. If eye contact occurs, rinse eyes thoroughly with water. BCI = 97. Total Biorenewable Carbon Index (BCI) was calculated only for the Stepan surfactants used in this formulation. Other ingredients were not evaluated. For further information on Stepan's BCI, visit www.stepan.com .	
For Additional Assistance	<p>NINOL® STEOL® STEPAN-MILD® STEPANOL®</p> <p>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.</p> <p>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. STEPAN COMPANY MAKES NO PRODUCT WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, EXPRESS OR IMPLIED, AND NO OTHER WARRANTY OR GUARANTY, EXPRESS OR IMPLIED, IS MADE, INCLUDING AS TO INFORMATION REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY, ACCURACY, COMPLETENESS, OR ADEQUACY. Stepan Company (and its employees, subsidiaries and affiliates) shall not be liable (regardless of fault) to the vendee, its employees, or any other party for any direct, indirect, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy, furnishing, use, or reliance upon information provided herein. The vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise to the fullest extent possible under the relevant law.</p>	
	 <p>Stepan Company Northfield, Illinois 60093 Telephone (847) 446-7500</p>	