

Formulation

Name	CLEAR SOLID DEODORANT STICK	
No.	1246	
Description	NINOL® CAA provides fragrance solubilization while maintaining clarity in the formulation.	
Formulation	<u>INGREDIENTS:</u>	<u>% by Weight</u> <u>Functionality</u>
	Deionized Water	q.s. to 100.00 Diluent
	Propylene Glycol	63.00 Solvent
	Sodium Stearate OP-200V (Hallstar) Sodium Stearate	8.00 Thickener
	NINOL® CAA	5.00 Surfactant, Thickener
	Sodium Chloride	1.15 Viscosity Adjuster
	Fragrance	2.50 Fragrance
	Dye	q.s. Dye
	Total	100.00
Procedure	<ol style="list-style-type: none"> 1. In a suitable vessel equipped with heating and agitation capabilities, add Deionized Water and Propylene Glycol. Heat to 50°C with mixing. 2. Add Sodium Stearate and mix until clear. Avoid aeration. 3. Add NINOL® CAA and Sodium Chloride, mixing well and avoiding aeration. 4. Begin heating to 75°C. Mix until everything is dissolved and begin cooling. 5. Cool to 70°C and add Fragrance. Mix until everything dissolved. 6. Add dye. Mix until everything dissolved. 7. Cool to 65°C and fill container. 	
Physical Properties	Appearance at 25°C	Translucent solid
Storage/ Stability	25°C at 6 months	Stable
	<p>This formulation was evaluated for turbidity (clarity in the appearance) compared to two other formulations: Deodorant Stick with NINOL® 40-CO and Deodorant Stick without Amides. The formulation containing NINOL® CAA showed better clarity (384 NTU) than the other two formulations (with NINOL® 40-CO: 446 NTU, without amide: 801 NTU). A lower value equals better clarity. All testing was completed using the Turbidity Analysis Test Method (SM 110-A).</p>	
External Comment	<p>Marketing Notes: NINOL® CAA provides fragrance solubilization while maintaining clarity of the formulation. Advanced clear formulation leaves no white residue. Provides odor protection, glides on smooth. BCI = 86. 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.</p>	
Registered Trademarks of Stepan Company	NINOL®	

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. **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.



Stepan Company
Northfield, Illinois 60093
Telephone (847) 446-7500

Revision Date: 10/10/2019 Publication Date: 11/20/2015 © 2019, Stepan Company. All rights reserved.