

Formulation

Name	CLEAR SOLID DEODORANT STICK	
No.	1246	
Description	NINOL® CAA provides fragrance solubilization while maintaining clarity in the formulation.	
Formulation	INGREDIENTS:	<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>	
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Assistance

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