



# Formulation

Name	<b>SPRAYABLE W/O SUNSCREEN LOTION WITH ZINC OXIDE (ESTIMATED SPF 15*)</b>	
No.	848	
Description	This cold mix formulation has excellent after-feel.	
Formulation	<b>INGREDIENTS:</b>	<b><u>% by Weight</u></b>
	=== Phase 1 ===	
	Deionized Water	q.s. to 100.0
	STEPANQUAT® ML	2.5
	PEG-12 Laurate (HALLSTAR® PEG 600 ML)	0.5
	Preservative	q.s.
	=== Phase 2 ===	
	Dow Corning 345 Fluid (Dow Corning) Cyclomethicone	20.0
	Ethylhexyl Isononanoate (HALLSTAR® OCTYL ISONONANOATE)	2.0
	Escalol 557 (ISP) Ethylhexyl Methoxycinnamate	7.5
	Escalol 587 (ISP) Ethylhexyl Salicylate	5.0
	Abil EM-90 (Goldschmidt) Cetyl Dimethicone Copolyol	1.5
	Z-Cote HP1 (BASF) Zinc Oxide and Dimethicone	1.0
	Fragrance, dye	q.s.
	<b>Total</b>	<b>100.00</b>
Procedure	Prepare Phase 1 (Water Phase). Mix well. Prepare Phase 2 (Oil Phase) in a separate container. Mix well. Add Phase 1 (Water Phase) slowly into Phase 2 (Oil Phase) with increasing agitation. Mix for 20 minutes. Homogenize for 3-5 minutes at 3500 - 5000 rpm. *in-vivo testing (2 subjects)	
Physical Properties	Appearance at 25°C	Opaque thin liquid
	Viscosity (Brookfield RV) #4 at 20 rpm, cps	800-1100
Storage/Stability	3 weeks at 25°C	Stable
	3 weeks at 42°C	Stable
	3 weeks at 50°C	Stable
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