Stepan 5. Formulation				
Name	AOS-BASED CONCENTRATED SHOWER GE	L		
No.	1443			
Description	This dilutable formulation is based on adapted selection of surfactants to achieve high concentrated shower gel. Dilute the formulation with tap water at a 1:3 ratio. Using 100 mL of concentrate will create a 400 mL shower gel. Recycle an emptied shower gel bottle or use a glass bottle for an eco-conscious packaging option. This formulation has a Natural Origin Content (NOC) of 0.81 and an NOI of 0.95 when diluted at a 1:3 ratio as outlined in ISO 16128.			
Formulation	INGREDIENTS:	<u>% by Weight</u>	<u>Functionality</u>	
	=== Phase 1 === AMPHOSOL® DM/MB So Shiny Fragrance (V. MANE FILS)		Secondary Surfactant Fragrance	
	=== Phase 2 === Glycerin 4811 (Oleon) Glycerin Euxyl® K720 (Ashland) STEPAN-MILD® PCL-BA BIO-TERGE® AS-40 HASB Propylene Carbonate (BASF) Deionized Water Unicert Red K7057-J (Sensient Cosmetic Technologies)	1.9 37.3 8.6 2.0 9.9	Emollient Preservative Primary Surfactant Primary Surfactant Solvent Carrier Dye	
	=== Phase 3 === Citric Acid	q.s.	pH Adjuster	
	Total	100.0		
Procedure	<ol> <li>In a vessel, mix Phase 1 ingredients at room temperature.</li> <li>Under agitation, add Phase 2 ingredients in the order above. The formulation could become hazy, continue to mix and add ingredients, clarity will come back with some time. The obtained formulation should be thin.</li> <li>Adjust pH to approximately 5 by adding Citric Acid with mixing.</li> <li>**Note: The INCI name for Euxyl® K720 from Ashland is Propylene Glycol (and) Benzoic Acid (and) Caprylyl Glycol and the INCI name for Unicert Red K7057-J from Sensient Cosmetic Technologies is CI 17200.</li> </ol>			
Physical Properties	Appearance, as is pH, as is Viscosity at 25⁰C, cps	Clear transparent liquid 5.0 210		
Storage/ Stability	4 weeks at 20°C 4 weeks at 5°C 4 weeks at 45°C	Stable Stable Stable		
Instructions for Use	Dilute in a bottle to desired level and enjoy the easy thicke then apply to body with water. Lather and rinse with water		sponge or wash cloth and	

External Comment	Marketing Notes: Natural Origin Content (NOC) of the "as is" formulation is 0.81 and 0.95 when diluted at a 1:3 ratio. The Natural Origin Content refers to the Natural Origin Index (NOI) as outlined in ISO 16128. This calculation is based on biorenewable carbon content for the specific ingredients used in Stepan's laboratories and includes balance formulation water, but excludes enhancers such as fragrance and dye. INCI List - Aqua, Coco Betaine, Sodium Methyl 2-Sulfolaurate (and) Disodium 2-Sulfolaurate (and) Sodium Lauryl Sulfoacetate, Sodium C14-16 Olefin Sulfonate, Propylene Glycol (and) Benzoic Acid (and) Caprylyl Glycol, Glycerin, Propylene Carbonate, Parfum, Citric Acid, CI 17200.	
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