



Formulation

Name	FRictionless (TOUCHLESS) CAR WASH	
No.	868	
Description	This formulation removes typical dirt build-up on a car without the need for brushes, bristles, or any mechanical action used for touchless wash systems.	
Formulation	INGREDIENTS:	<u>% by Weight</u> <u>Functionality</u>
	=== Phase 1 ===	
	Deionized Water	q.s. to 100.0 Diluent
	Metso 20 (PQ) Sodium Metasilicate Pentahydrate	3.0 Builder
	=== Phase 2 ===	
	Versene 100 (Dow Chemical) Tetrasodium EDTA	35.0 Chelating Agent
	STEPANATE® SXS	10.0 Hydrotrope
	BIO-TERGE® PAS-8S	5.0 Primary Surfactant
	MAKON® 10	5.0 Emulsifier
	Total	100.0
Procedure	Phase 1 1. Charge tank with Deionized Water. 2. Add the Metso 20 and thoroughly mix until dissolved. Phase 2 1. Add ingredients in order shown to Phase I and mix thoroughly until homogeneous.	
Physical Properties	Appearance at 25°C	Clear liquid
	pH, as is	13.4
	Viscosity at 25°C, cps	Water thin
	Density, lbs/gal	9.0
	Solids, %	26.5–29.5
	VOC (calculated) at 1:100 dilution level, %	0
Storage/ Stability	1 Month at 25°C	Stable
	1 Month at 4°C	Stable
	1 Month at 50°C	Stable
	Freeze/Thaw, 10 Cycles	Pass
Instructions for Use	This formulation can be diluted to 1:100 and applied with the proper car wash equipment.	
External Comment	Marketing Notes: When used at Stepan's recommended dilution level of 1:100, this formulation is VOC-compliant with U.S. Federal and California Air Resource Board (CARB) Consumer Products regulation for non-aerosol, motor vehicle wash (0.2% VOC limit as of December 31, 2012). BIO-TERGE® PAS-8S and STEPANATE® SXS are approved ingredients on www.cleangredients.org .	
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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.

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