

# Formulation

Name	<b>CAR WASH CONCENTRATE WITH COCAMIDE DEA ALTERNATIVE</b>	
No.	1109	
Description	This consumer-type formula is designed for easy dilution while generating a large amount of stable foam.	
Formulation	<b>INGREDIENTS:</b>	<b><u>% by Weight</u>    <u>Functionality</u></b>
	Deionized Water	q.s. to 100.00 Carrier
	Sodium Chloride	0.25 Thickener
	BIO-SOFT® D-40	20.00 Primary Surfactant
	AMMONYX® LMDO	10.00 Secondary Surfactant
	Dye	q.s. Additive
	Fragrance	q.s. Additive
	Preservative	q.s. Additive
	<b>Total</b>	<b>100.00</b>
Procedure	1. Charge tank with water. 2. Add ingredients in order shown above and mix until homogenous.	
Physical Properties	Appearance at 25°C	Clear liquid
	Viscosity at 25°C, cps	830
	pH, as is concentrate	9.0
	Solids, %	11.25
	VOC (calculated) as is, %	0
Storage/Stability	4 weeks at 50°C	Stable
	4 weeks at 25°C	Stable
	4 weeks at 4°C	Stable
	Freeze/Thaw, 3 cycles	Stable
Instructions for Use	Dilute 1 ounce to 1 gallon of water (1:128). Mix and apply using a sponge. Rinse and dry the car surface.  Foaming performance is unsurpassed to commercially available products in both Ross-Miles and Shake Foam Tests.	
External Comment	Marketing Notes: When used as per Stepan's recommendations, 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-SOFT® D-40 and AMMONYX® LMDO are approved ingredients on <a href="http://www.cleangredients.org">www.cleangredients.org</a> . This formulation does not contain Nonylphenol Ethoxylates (NPEs). AMMONYX® LMDO is an alternate surfactant for those customers that do not want Cocamide DEA in their formulation.	
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