



Formulation

Name	CITRUS HEAVY DUTY CLEANER	
No.	1147	
Description	This neutral ready-to-use cleaner has a dual surfactant package to easily remove tough household soils from a variety of surfaces. The d-Limonene cuts through greasy build-up and leaves a pleasant orange fragrance.	
Formulation	INGREDIENTS:	<u>% by Weight</u> <u>Functionality</u>
	d-Limonene	0.5 Solvent
	BIO-SOFT® N91-2.5	1.0 Emulsifier
	BIO-SOFT® N91-8	1.0 Wetting Agent
	STEPANOL® WA-EXTRA	3.3 Surfactant
	STEPANATE® SXS	12.0 Hydrotrope
	Deionized Water	82.2 Diluent
	Sodium Hydroxide	q.s. pH Adjuster
	Preservative	q.s. Preservative
	Total	100.0
Procedure	<ol style="list-style-type: none"> 1. Charge d-Limonene. With mixing, blend in BIO-SOFT® N91-2.5 and BIO-SOFT® N91-8. 2. Mix for 5 minutes. 3. With good agitation, slowly blend in STEPANOL® WA-EXTRA. Continue to mix until homogeneous. 4. Slowly blend in the Water, followed by STEPANATE® SXS. 5. Mix until homogenous. 6. Blend in Preservative. 7. Adjust pH to 6.5–7.5 with Sodium Hydroxide. 	
Physical Properties	Appearance	Clear liquid
	pH, as is	6.5–7.5
	Viscosity	Water thin
	VOC (calculated), %	0.5%
Storage/Stability	3 Freeze/thaw cycles	Pass
	4 weeks at 25°C	Stable
	4 weeks at 4°C	Stable
	4 weeks at 50°C	Stable
Instructions for Use	Spray on soiled surface. Wipe with cloth or paper towel. Rinsing is not required.	
	Cleaning Performance: ASTM D4488-95-A5 Gardner Straightline Washability Test - 91% soil removed	
External Comment	STEPANOL® WA-EXTRA can be replaced with STEPANOL® WA-EXTRA PCK or STEPANOL® WA-EXTRA K. This formulation is VOC compliant with US Federal and State VOC standards for General-Purpose Cleaning.	

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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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Stepan 

Stepan Company
Northfield, Illinois 60093
Telephone (847) 446-7500

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