



# Formulation

Name	<b>LOW FILM / STREAK GLASS CLEANER CONCENTRATE</b>	
No.	1319	
Description	This highly concentrated, solvent-free formula is designed to be diluted 1:128 for low streak glass cleaning. Formulated with Stepan's low film/streak technology, it eliminates the need for flammable organic solvents, thus avoiding the need for flammable storage. Use on windows, mirrors and glass display cases.	
Formulation	<u>INGREDIENTS:</u>	<u>% by Weight</u> <u>Functionality</u>
	Deionized Water	74.0 Diluent
	BIO-SOFT® LFS-04	13.0 Surfactant
	BIO-TERGE® AS-40 HP	13.0 Surfactant
	Preservative, Fragrance, and Dye	q.s. Additives
	<b>Total</b>	<b>100.0</b>
Procedure	<ol style="list-style-type: none"> <li>1. Charge Deionized Water.</li> <li>2. Add BIO-SOFT® LFS-04.</li> <li>3. Add BIO-TERGE® AS-40 HP.</li> <li>4. Mix until homogeneous.</li> <li>5. Add preservative, fragrance, and dye as desired.</li> <li>6. Mix until homogeneous.</li> </ol>	
Physical Properties	Appearance at 25 °C	Clear liquid
	pH, as is	11-11.5
	pH, diluted 1:128	7-8
	Viscosity at 25°C, cps	Water thin
	VOC, as is (calculated), %	0
	Flash Point (PMCC), °F	>200
Storage/ Stability	Freeze/Thaw, 3 cycles	Pass
	4 weeks at 50°C	Stable
	4 weeks at 25°C	Stable
	4 weeks at 4°C	Stable
Instructions for Use	<p>For glass cleaning, dilute the formulation to 1:128. Spray onto surface. Can be used with or without a squeegee. Wipe dry. Diluted cleaner should be used when made and not stored for later use.</p> <p>This formulation, when diluted 1:128 for use using 140 ppm Stepan tap water, performs equal to the market leading "unbeatable streak-free shine!" glass cleaner on mirror surfaces, using Stepan proprietary test method (SM250-A Application 01, Quantitative Measurement of Filming/Streaking).</p>	
External Comment	<p>Marketing Notes: Stepan low film/streak nonionic technology helps this formula to provide good low film/streak on glass surfaces without rinsing or need for volatile organic solvents. The choice of surfactants avoids the need for sequestering agents. Formulation is compliant with all U.S. Federal and State VOC standards for glass cleaners as of July 2019, both at any dilution and at the</p>	

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specified 1:128 dilution.

BIO-SOFT®  
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For  
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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