

Product Bulletin

Product Name	BIO-SOFT® LFS-07																																		
Chemical Description	Nonionic Blend																																		
CAS Registry Number	Proprietary																																		
Applications	BIO-SOFT LFS-07 is a high active nonionic surfactant blend that can be used in a wide variety of cleaning applications due to its degreasing power. This product is especially useful in cleaners used on surfaces where powerful cleaning combined with minimal filming/streaking is desired, such as glass windows and mirrors, floors, ceramic, and vehicle body and windows. BIO-SOFT LFS-07 can often replace alkyl polyglucoside surfactants in cleaners due to its excellent low film/streak performance. With BIO-SOFT LFS-07, a single cleaner can be formulated to work on all these surfaces and heavily soiled ones as well. BIO-SOFT LFS-07 is made to have a very low pour point for easy handling, remaining clear and fluid down to -15 °C.																																		
Typical Properties	<table border="0"> <tr> <td>Appearance at 25 °C (77 °F)</td> <td>Clear liquid</td> </tr> <tr> <td>Actives, %.....</td> <td>90</td> </tr> <tr> <td>pH, 1% aqueous.....</td> <td>10.5</td> </tr> <tr> <td>Color, APHA</td> <td><80</td> </tr> <tr> <td>HLB.....</td> <td>11.9</td> </tr> <tr> <td>Viscosity at 25 °C (77 °F), cps.....</td> <td>64</td> </tr> <tr> <td>Flash Point (PMCC), °C (°F).....</td> <td>>94 (>201)</td> </tr> <tr> <td>Cloud Point, 1% aqueous, °C (°F).....</td> <td>34 (93)</td> </tr> <tr> <td>Freeze Point, °C (°F)</td> <td>-15 (5)</td> </tr> <tr> <td>Density, g/ml (lbs/ U.S gal).....</td> <td>1.00 (8.33)</td> </tr> <tr> <td>Surface Tension at CMC, dynes/cm.....</td> <td>27.1</td> </tr> <tr> <td>Draves Wetting, 1% aqueous, at 25 °C (77 °F), sec.....</td> <td>4.3</td> </tr> <tr> <td>Critical Micelle Concentration, mg/L.....</td> <td>300</td> </tr> <tr> <td>Ross Miles Foam, Initial, 0.1% aqueous, cm.....</td> <td>7.9</td> </tr> <tr> <td>Ross Miles Foam, 5-min, 0.1% aqueous, cm.....</td> <td>3.3</td> </tr> <tr> <td>RVOC, U.S. EPA, %.....</td> <td>0</td> </tr> <tr> <td>Preservative.....</td> <td>None required</td> </tr> </table>	Appearance at 25 °C (77 °F)	Clear liquid	Actives, %.....	90	pH, 1% aqueous.....	10.5	Color, APHA	<80	HLB.....	11.9	Viscosity at 25 °C (77 °F), cps.....	64	Flash Point (PMCC), °C (°F).....	>94 (>201)	Cloud Point, 1% aqueous, °C (°F).....	34 (93)	Freeze Point, °C (°F)	-15 (5)	Density, g/ml (lbs/ U.S gal).....	1.00 (8.33)	Surface Tension at CMC, dynes/cm.....	27.1	Draves Wetting, 1% aqueous, at 25 °C (77 °F), sec.....	4.3	Critical Micelle Concentration, mg/L.....	300	Ross Miles Foam, Initial, 0.1% aqueous, cm.....	7.9	Ross Miles Foam, 5-min, 0.1% aqueous, cm.....	3.3	RVOC, U.S. EPA, %.....	0	Preservative.....	None required
Appearance at 25 °C (77 °F)	Clear liquid																																		
Actives, %.....	90																																		
pH, 1% aqueous.....	10.5																																		
Color, APHA	<80																																		
HLB.....	11.9																																		
Viscosity at 25 °C (77 °F), cps.....	64																																		
Flash Point (PMCC), °C (°F).....	>94 (>201)																																		
Cloud Point, 1% aqueous, °C (°F).....	34 (93)																																		
Freeze Point, °C (°F)	-15 (5)																																		
Density, g/ml (lbs/ U.S gal).....	1.00 (8.33)																																		
Surface Tension at CMC, dynes/cm.....	27.1																																		
Draves Wetting, 1% aqueous, at 25 °C (77 °F), sec.....	4.3																																		
Critical Micelle Concentration, mg/L.....	300																																		
Ross Miles Foam, Initial, 0.1% aqueous, cm.....	7.9																																		
Ross Miles Foam, 5-min, 0.1% aqueous, cm.....	3.3																																		
RVOC, U.S. EPA, %.....	0																																		
Preservative.....	None required																																		
Environmental Effects	BIO-SOFT LFS-07 is expected to be readily biodegradable based on the biodegradation profile of its major component(s).																																		
Health Effects	BIO-SOFT LFS-07 is expected to be slightly toxic orally (LD 50 >500 mg/kg). Undiluted product is expected to be severely irritating to eyes, and may cause irreversible eye damage.																																		
Storage & Handling	<p>Normal safety precautions (e.g., gloves and safety goggles) should be employed when handling BIO-SOFT LFS-07. Avoid contact with eyes and nose, or prolonged contact with the skin. Wash thoroughly after handling.</p> <p>BIO-SOFT LFS-07 dilutes easily into water with minimal tendency to form gels at room temperature and above.</p>																																		



Standard Packaging: BIO-SOFT LFS-07 is available in drums. Please inquire if larger sizes are required.

Packaging Storage Recommendations: BIO-SOFT LFS-07 should be stored in closed containers and kept in a cool, dry place away from incompatible materials (see Section 10 of the SDS). Product should be stored at temperatures from 0 °C (32 °F) to 50 °C (122 °F). If material is frozen it should be heated gently and stirred to ensure it is homogeneous prior to use.

Clearances

The international inventories (country clearances) of BIO-SOFT LFS-07 can be found in Section 15 of the Safety Data Sheet (SDS). **It is the responsibility of the formulator to review the chemical control regulations for each country where the end product is intended to be sold or used.** If you have further questions regarding inventories, please contact North America Technical Service at techserv@stepan.com.

Product Stewardship

This product bulletin has been written in accordance with ACC's Product Stewardship guidelines.

Additional Safety Information

A Safety Data Sheet is available upon request.



The information contained herein is based on the manufacturer's own study and the works of others and is subject to change without prior notice. The information is not intended to be all-inclusive, including as to the manner and conditions of use, handling, storage or disposal or other factors that may involve additional legal, environmental, safety or performance considerations. Nothing contained herein grants or extends a license, express or implied, in connection with any patents issued or pending of the manufacturer or others, or shall be construed as a recommendation to infringe any patents. STEPAN COMPANY MAKES NO PRODUCT WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, EXPRESS OR IMPLIED, AND NO OTHER WARRANTY OR GUARANTY, EXPRESS OR IMPLIED, IS MADE, INCLUDING AS TO INFORMATION REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY, ACCURACY, COMPLETENESS, OR ADEQUACY. Stepan Company (and its employees, subsidiaries and affiliates) shall not be liable (regardless of fault) to the vendee, its employees, or any other party for any direct, indirect, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy, furnishing, use, or reliance upon information provided herein. The vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise to the fullest extent possible under the relevant law."

Stepan 
Corporate Headquarters
Northfield, Illinois 60093, U.S.A.
Phone: 847-446-7500
Fax: 874-501-2100
Website: www.stepan.com

For Technical Service Call:
Stepan North America **+1-800-745-7837**
Stepan Mexico **+55-11-5089-2208**
Stepan Quimica **+55-11-5089-2200**
Stepan Colombia **+571-636-2808**
Stepan Europe **+33-476-505-160**
Stepan Asia **+656-879-9855**
Stepan Philippines **+656-879-9855**

For Customer Service Call:
Stepan North America **+1-800-457-7673**
Stepan Mexico **+52-555-533-1967**
Stepan Quimica **+55-11-5089-2200**
Stepan Colombia **+57-6-8993125**
Stepan UK **+44-161-338-5511**
Stepan France **+33-476-50-51-00**
Stepan Philippines **+63-2-842-7951**