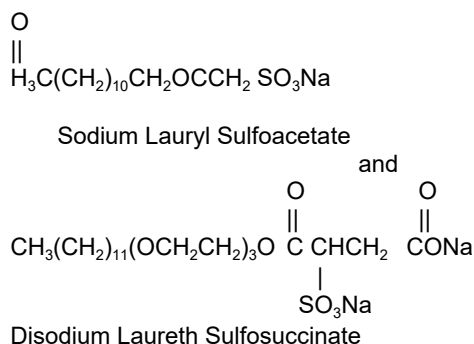


Product Bulletin

Product Name

STEPAN-MILD® LSB

Chemical Structure



CAS Registry Number

1847-58-1 and 39354-45-5

Applications

STEPAN-MILD LSB is a versatile anionic surfactant blend which can be used in a variety of personal care applications. It is a mild surfactant blend with good foam quality and viscosity building characteristics in formulated products. It is used for children and baby products as well as for adult products where sensitive skin is involved.

STEPAN-MILD LSB can be used as a mild primary or secondary surfactant. It is less irritating than lauryl and lauryl ether sulfates. STEPAN-MILD LSB easily builds high viscosity with amides and salts and provides excellent foam stability.

It is an exceptional hard water foamer, a highly effective lime soap dispersant and foams well in the presence of soap. STEPAN-MILD LSB should be formulated within the pH range of 5.5 - 6.5.

Typical Properties

Appearance at 25°C	Clear liquid
Actives (EW 491), %	25.0
pH, 10% aqueous	6.0
Color, Gardner	1
Cloud Point (as is), °C (°F)	12 (53)
Boiling Point, °C (°F)	>100 (>212)
Pour Point, °C (°F)	3 (37)
Freeze Point, °C (°F)	0 (32)
Flash Point, PMCC, °C (°F)	>94 (>201)
Viscosity at 25°C, cps	3,000
Solids, %	32.5
Density, g/mL (lbs/U.S. gal)	1.03 (8.6)
Critical Michelle Concentrate, g/L	2.1
Sodium Sulfate, %	3.0 max.
Sodium Chloride, %	2.0 max.
RVOC, U.S. EPA, %	0
Preservative	Benzoic Acid



Environmental Effects

STEPAN-MILD LSB is biodegradable. A detailed biodegradability statement is available upon request.

Health Effects

STEPAN-MILD LSB is slightly toxic orally ($LD_{50} \leq 5g/kg$). The product causes mild skin and eye irritation at 10% active.

Storage & Handling

Normal safety precautions (e.g., gloves and safety goggles) should be employed when handling STEPAN-MILD LSB. Contact with eyes, nose or prolonged contact with skin should be avoided. Wash thoroughly after handling STEPAN-MILD LSB. See SDS for more information.

Standard Packaging: STEPAN-MILD LSB is available in drums, totes, and bulk quantities.

Non-Bulk Storage Recommendations: It is recommended that STEPAN-MILD LSB be stored in sealed containers and kept at a temperature $<30^{\circ}C$ ($<86^{\circ}F$). Avoid freezing or overheating. If material is frozen, warm slowly to room temperature and agitate to ensure material is homogeneous before use. Do not expose this product to temperatures $>30^{\circ}C$ ($>86^{\circ}F$) for an extended period of time. Sulfosuccinates (a component of STEPAN-MILD LSB) typically display evidence of instability with storage at elevated temperatures, as indicated by a decrease in pH and an increase in the nonionic content which will increase the viscosity of STEPAN-MILD LSB. Stepan's recommended re-test for this product is 12 months from the date of manufacture. After 12 months, we recommend the customer reanalyze to assure product is within specification.

Workplace Exposure

Occupational exposure can occur primarily through skin contact or via inhalation of vapors and mists. Engineering controls, personal protective equipment, and other workplace safety practices should be used to control these exposures. See SDS for more information.

Clearances

The international inventories (country clearances) of STEPAN-MILD LSB 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 any 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 (SDS) is available upon request.



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