



Patent Pending Suga®Det LSDG

High Foam, Sulfate-Free Blend

DESCRIPTION Decyl Glucoside (and) Disodium Lauryl Sulfosuccinate

CAS 68515-73-1, 26838-05-01

LISTINGS USA (TSCA), Canada (DSL), EU (REACH), Australia (AIIIC), China (IECIC/IECSC), New Zealand (NZIoC), Taiwan (TSCI)

Suga®Det LSDG is a liquid, easy to use blend of a mild, high foam sulfosuccinate and a mild, high foam alkylpolyglucoside. The sulfosuccinate portion is normally supplied as a semisolid paste so this blend is especially useful for formulators incorporating this potentially tricky to dispense product or those interested in reducing the carbon footprint of their manufacturing by designing cold-mix formulations. It is derived from sustainable plant materials and has a very high bio-renewable carbon content. The combination is optimized to generate copious amounts of foam with dense bubble structure for an extremely luxurious feel.

BENEFITS

- High foaming surfactant combination
- Outstanding foam height
- High cushion foam with a luxurious feel
- Gentle yet efficient cleansing
- High biobased content
- Easy to use liquid form

APPLICATIONS

- Sulfate-free cleansers
- Aerosol foams
- Pump foaming cleansers
- Syndet bar additive

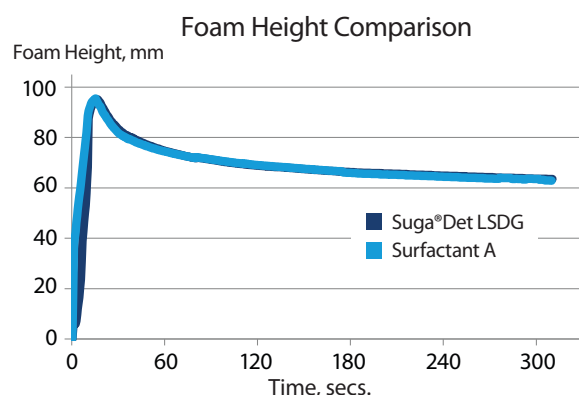


TYPICAL PROPERTIES

Appearance @ 25°C	Clear Liquid
pH (10% aqueous)	5.5
Solids, %	33.0
Color, Gardner BYK	1.0 Max.
Viscosity @ 25°C, cP	100 Max.

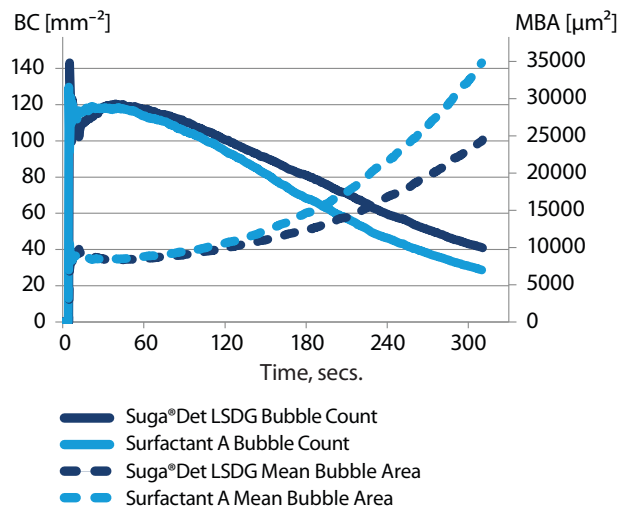
FOAM STUDIES

Comparison of Suga®Det LSDG to a leading sulfate-free surfactant benchmark "Surfactant A".



Foam height of Suga®Det LSDG compared to Surfactant A. Nearly identical performance is observed under the test conditions.

Bubble Count and Mean Bubble Area Comparison



The Bubble Count and Mean Bubble Area of Suga®Det LSDG were compared to Surfactant A. Suga®Det LSDG demonstrated similar initial size and bubble density, but retained the tight bubble structure longer, demonstrating a more rigid and stable foam.

Foaming Skin Cleanser

No. 2079

Using mild, plant-based surfactants, this cold-mix foaming cleanser is both moisturizing and ideal for normal to sensitive skin types. Designed for a foamer bottle and provides a creamy and stable foam. Sulfate-free.

INGREDIENT / INCI	%
1 Water	qs to 100.00
2 Glycerin	5.00
3 Suga®Det LSDG / Disodium Lauryl Sulfosuccinate, Decyl Glucoside	10.00
4 Suga®Nate 160NC / Sodium Laurylglucosides Hydroxypropylsulfonate	15.00
5 Cola®Lipid C / Cocamidopropyl PG-Dimonium Chloride Phosphate	0.50
6 Euxyl® K712 / Sodium Benzoate, Potassium Sorbate	1.00
7 Fragrance	0.10
8 Citric Acid 50%	qs to pH 5.0 – 5.5

PROCEDURES

Combine ingredients 1 – 7 in order. Mix until clear and uniform. Adjust to pH 5.0 – 5.5 with ingredient 8 (~0.25%).

TYPICAL PROPERTIES

Clear Liquid, pH 5.0 – 5.5, Viscosity: < 50 cP

Naturally Easy Body Wash

No. 2080

Highlighting plant-based ingredients, this cold-mix body wash is free of common skin irritants and removes dirt, sweat, odor and excess oils without stripping skin. Features a beautiful pearl finish and a natural thickener. Sulfate-free.

INGREDIENT / INCI	%
1 Water	qs to 100.00
2 Solagum™ Tara / Caesalpinia Spinosa Gum	1.25
3 Suga®Det LSDG / Disodium Lauryl Sulfosuccinate, Decyl Glucoside	30.00
4 Suga®Det EcoPearl / Water and Glycol Distearate and Sodium Hydroxypropylphosphate Decylglucoside Crosspolymer and Cocamidopropyl Hydroxysultaine and Sodium Stearoyl Lactylate	3.00
5 Euxyl® K712 / Sodium Benzoate, Potassium Sorbate	1.00
6 Fragrance	0.20

PROCEDURES

Combine ingredients 1 – 6 in order. Mix until clear and uniform. If necessary, adjust to pH 5.0 – 5.5 with citric acid.

TYPICAL PROPERTIES

Clear Liquid, pH 5.0 – 5.5, Viscosity: 5,000 – 8,000 cP

4X Concentrated Clear Liquid Shampoo

No. 1062

Cold-mixed, clear concentrated shampoo with plant-based ingredients. Less liquid but with all of the cleansing benefits, and perfect for light packing in travel-sized bottles. Sulfate-free.

INGREDIENT / INCI	%
1 Cola®Teric CBS-HP / Cocamidopropyl Hydroxysultaine	36.00
2 Suga®Det LSDG / Disodium Lauryl Sulfosuccinate, Decyl Glucoside	60.00
3 Cola®Lipid GS / Sodium Grapeseedamidopropyl PG-Dimonium Chloride Phosphate	3.00
4 Euxyl® K712 / Sodium Benzoate, Potassium Sorbate	0.50
5 Fragrance	0.50

PROCEDURES

Combine ingredients 1 – 5 in order. Mix until clear and uniform. If necessary, adjust to pH 5.0 – 5.5 with citric acid.

TYPICAL PROPERTIES

Clear Liquid, pH 5.0 – 5.5, Viscosity: 5,000 – 9,000 cP, Surfactant Solids: 36.6 – 39.2



Suga®Det LSDG contains **86%** USDA certified biobased content via the USDA BioPreferred® Program.

Suga®Det LSDG is “Derived Natural” with a Natural Origin Index of 0.9 in accordance with ISO 16128 guideline.

STORAGE / HANDLING

Suga®Det LSDG should be stored in sealed containers at temperatures not exceeding 120°F (49°C). Shipped in poly drums (net weight 450 lb/204 kg). Typical shelf life is 12 months from date of manufacture. Safety Data Sheets may be found at www.colonialchem.com.



Colonial Chemical
Innovative Specialty Surfactants
www.colonialchem.com