



HOME CARE
AND I&I



PERSONAL
CARE

INDORAMA
VENTURES




GLUCOSURF®


Mild and highly compatible
bio-based surfactants





GLUCOSURF® is a line of alkyl polyglucosides for Personal Care, Home Care and I&I. The line comprises versatile ingredients that can be used in various applications, from baby care to surface hard cleaning. GLUCOSURF® is mild, very gentle to the skin and eyes and it is an excellent foam stabilizer.


BENEFITS


- 


Tolerant to high pH
- 


EO, preservative and sulfate free
- 


Mild to skin and eye
- 

Tolerant to high electrolyte concentration
- 

Produces rich and stable foam
- 

Green circle on Safer Choice
- 

Compatible with other surfactant families
- 

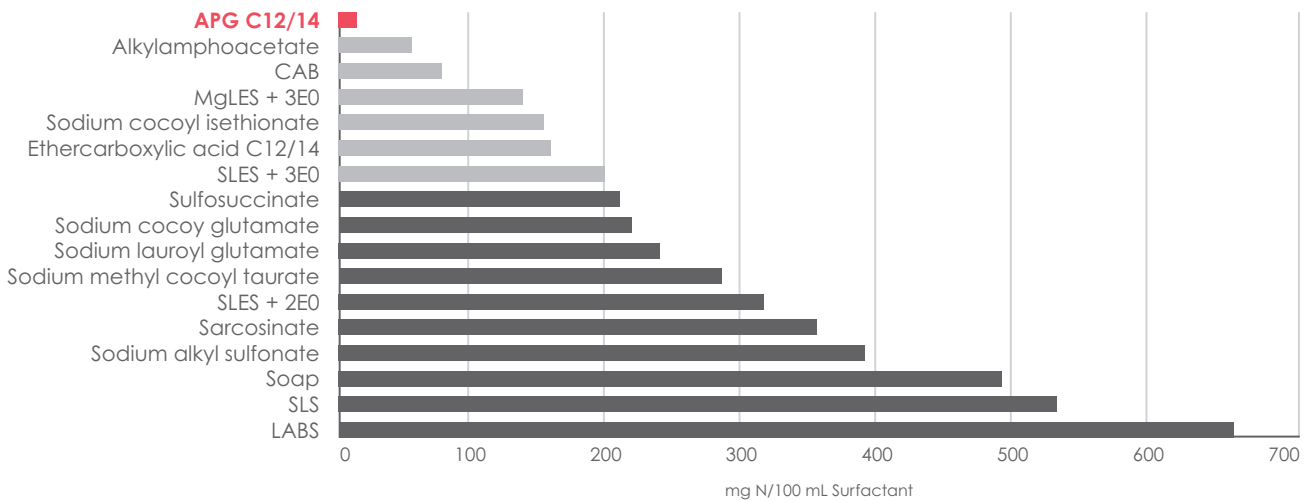
Readily Biodegradable
- 

Natural Origin Index I_{NO} (ISO 16128) = 1



MILDNESS

- Alkyl polyglucosides are extremely mild surfactants;
- Skin-compatible;
- Excellent choice for baby products and mild formulations.



Zein values for various surfactants at 1% active matter.

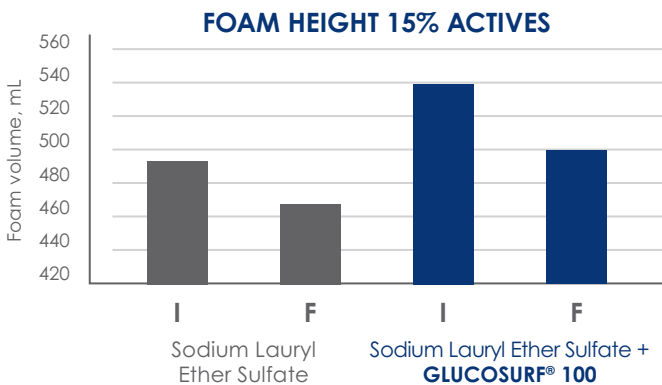
Zein test: Zein, a yellow corn protein that closely resembles the keratin present in skin, is the star of the show in this test. This method determines the likelihood of a surfactant solution to damage skin protein by measuring the amount of zein the solution can dissolve. The more zein dissolved, the higher the solution's skin irritation potential and the lower its mildness.

Sodeopac: Soaps, Detergents, Oleochemicals and Personal Care Products by Spitz, Luis.



FOAM HEIGHT AND STABILITY

When used as a co-surfactant in combination with sodium lauryl ether sulfate, GLUCOSURF® 100 improves initial foam volume (flash foam) and foam stability over time (final foam volume).



Dynamic foam analysis: SLES and SLES + GLUCOSURF® 100 combination (80:20). Results are significantly different at 95% confidence level.

FOAM CREAMINESS

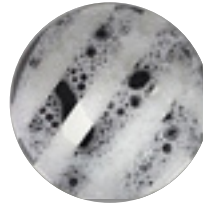


Figure 1:
Sodium Lauryl Ether Sulfate
(15% actives, deionized water)

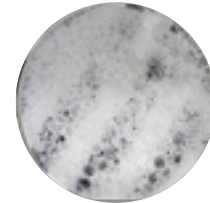


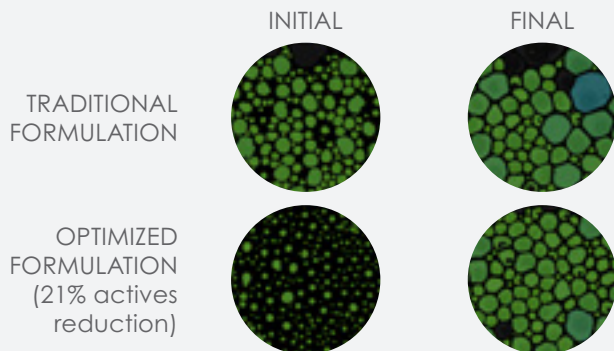
Figure 2:
Sodium Lauryl Ether Sulfate +
GLUCOSURF® 100
(80:20, 15% actives, deionized water)

Alkyl polyglucosides are great foam stabilizers, providing rich creamy foam during application due to the formation of small homogeneous bubbles.

Warning to users: This Technical Bulletin contains information presented in good faith, based on Indorama's current knowledge about the matter, and has only indicative value. Any information, including product use suggestions, must include testing and experimental verifications, essential to ensure product fitness for each specific application. The final formulator is also responsible for observing local legislation and obtaining all necessary authorizations. When handling the product, it is essential to refer to the material safety data sheet. In case of doubts or additional needs, contact our customer service channels. Icons' credits to The Noun Project.

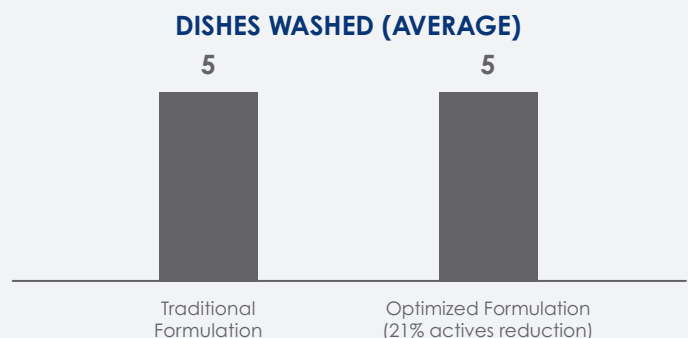
RE-DESIGN TRADITIONAL DISHWASHING FORMULATION

GLUCOSURF® line combines a mild and 100% natural ingredient with a potential of cost reduction through rebalancing the formulation.



Optimized formulation shows smaller bubble size providing greater creaminess and foam stability with the same volume of foam.

LAVREX® 200	Linear Alkylbenzene Sulfonic Acid
ALKOPON® N	Sodium Laureth Sulfate
OXITAIN® CP 30 APH	Cocamidopropyl Betaine
GLUCOSURF® 100	Alkyl Polyglucosides





PRODUCT LINE AND PROPERTIES

	GLUCOSURF® 100	GLUCOSURF® 120	GLUCOSURF® 810
INCI Name	DECYL GLUCOSIDE	LAURYL GLUCOSIDE	CAPRYLYL/CAPRYL GLUCOSIDE
CAS Number	68515-73-1 110615-47-9	110615-47-9	68515-73-1
Appearance	Liquid, slightly yellowish	Liquid to pasty, slightly yellowish	Liquid, slightly yellowish
Solid Content (%)	~ 50	~ 50	~ 50
Water Content (%)	~ 50	~ 50	~ 50
pH (aqueous solution 10%)	11.5 – 12.5	11.5 – 12.5	11.5 – 12.5
Viscosity (mPa.s), 20 °C	1000 – 2000	2000 – 4000	200 – 600

The properties described above are for informational purposes only and may change without notice. Please contact Indorama Ventures for the current specification if necessary.

DOSAGE

1 to 15%, depending on the formulation desired.

APPLICATIONS

HOME CARE AND I&I

- Neutral and alkalyne surface cleaners
- Peroxyde cleaners
- Cleaning wipes
- Dishwashers
- Laundry detergents



PERSONAL CARE

- Shampoos
- Liquid soaps
- Bath foams
- Facial cleansers
- Baby products
- Wet wipes
- Oral care
- Creams and lotions

