



Suga[®]Nate 100NC

Naturally-Derived High-Foaming Surfactant

INCI Sodium Decylglucosides Hydroxypropylsulfonate
CAS 742087-48-5 **PATENT** 6,627,612, 7,045,506
LISTINGS USA (TSCA); Canada (NDSL); EU (REACH); Taiwan (NECI)

Suga[®]Nate 100NC is a high foaming sulfonated surfactant based on a naturally-derived alkyl polyglucoside derivative. Suga[®]Nate 100NC offers good emulsification, mildness to the skin, and excellent lime soap dispersion to give the formulator maximum flexibility in the preparation of light and heavy-duty cleaners. Suga[®]Nate 100NC can be used in dishwashing liquids that feature outstanding grease emulsification, mildness to the hands, and excellent foam stability. Suga[®]Nate 100NC exhibits superior cleaning in very hard water, reducing the need for expensive builder in the formulation. It is also suitable for use in acidic formulations such as those containing glycolic or α -hydroxy acids. The stability of Suga[®]Nate 100NC at any pH makes it desirable in many formulations for industrial, institutional and household use.

BENEFITS

- Naturally derived
- Extremely mild to skin and eyes
- Biodegradable
- Builds wet, dense, stable foam
- Excellent wetting properties
- Stable over broad pH range
- Excellent lime soap dispersion
- 1,4-Dioxane-free
- Excellent emulsification
- Compatible with other surfactants
- Excellent hydrotropic properties
- Safe for the environment
- Safe for humans

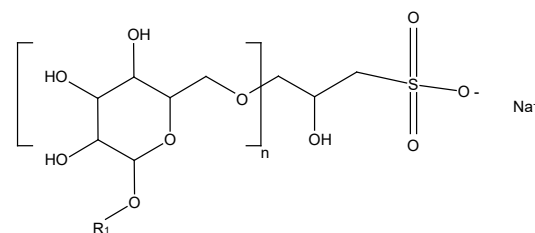
APPLICATIONS

- Carpet cleaners
- Hard surface cleaners
- Dish washing products
- Hand soaps
- Toilet bowl cleaners
- Hand wipes



SPECIFICATION / STRUCTURE

Appearance (25°C)	Clear liquid
pH (10% Solution)	6.5 – 8.5
% Solids	39.0 – 41.0
Color, Gardner '98	4 Max.
Ross Miles Foam (1%, 25°C, tap water), mm	
Immediate	175
1 minute	163
5 minutes	160
Draves Wetting (1% active)	Immediate



EYE / SKIN IRRITATION TESTING

- **MatTek EpiOcular[™] Eye Irritation Test**
28.9 mins. (ET-50 score) *Minimally-Irritating*
- **Acute Skin Irritation**
48 Hour Occlusive skin patch test: On human volunteers - 53 Test Subjects: **no visible skin reaction, no potential for dermal irritation.**
- **Skin Sensitization**
Repeat Insult Patch testing (HRIPT): **no potential for dermal irritation or allergic contact sensitization.**

Environmentally-Friendly Toilet Descaler and Cleaner No. 5026

Toilet bowl cleaner to eliminate water stains, mold, and mildew.

	TRADE NAME / INCI NAME	%
1	Water	qs to 100.00
2	Ticaxcan® Rapid / Xanthan Gum	0.75
3	Citric Acid	3.00
4	Suga®Nate 100NC / Sodium Decylglucosides Hydroxypropylsulfonate	2.00
5	Glycolic Acid	1.00

PROCEDURE:

Slowly sprinkle the xanthan gum over the water with vigorous mixing, slow the mixing if necessary as the mixture thickens to avoid trapping air. Add remaining ingredients.

TYPICAL PROPERTIES:

Appearance: Slightly hazy liquid
pH: 2.5 – 3.0
Viscosity: 3030 cP

Shower Jelly Soap No. 4027

Unique jelly soap formulation that is gentle on skin. Made with a softening gel base to clean and foam as regular bar soap. Simply pop out of the container, wet jelly and lather. Rinse as normal.

	TRADE NAME / INCI NAME	%
1	Water	qs to 100.00
2	Genuvisco® Carrageenan CG-131	2.25
3	Glycerin	5.00
4	Suga®Nate 100NC / Sodium Decylglucosides Hydroxypropylsulfonate	15.00
5	Cola®Teric CBS / Cocamidopropyl Hydroxysultaine	5.00
	Euxyl® K712 / Sodium Benzoate and Potassium Sorbate	1.00
	WS Apple Fragrance	0.20
	Dye	qs

PROCEDURE:

Premix ingredients 2 – 3 to create a smooth slurry. Add the slurry to water with moderate agitation. Continue mixing until completely hydrated. Heat to 70 – 75°C, then add ingredients 4 – 8. Maintain temperature and mix until uniform, then immediately fill containers and allow to cool.

TYPICAL PROPERTIES:

Appearance: Clear Gel Bar Soap
pH: 5.0 – 6.0

RECOGNITION

Suga®Nate 100NC is the recipient of the EPA's New Chemicals Program Pollution Prevention (P2) Recognition Award. Innovative new chemicals are selected for recognition by the New Chemicals Program P2 Recognition Project because they promote source reduction as well as safety goals, in particular when the innovative chemistries substitute for existing chemicals posing greater risks. Suga®Nate 100NC is selected because it is a sulfonated surfactant based on the renewable resource of alkyl polyglucoside, a naturally-derived, sustainable raw material. This primary surfactant is readily biodegradable, soluble in water and non-irritating to the skin. Suga®Nate 100NC is a safe replacement for heavily ethoxylated surfactants.

ADDITIONAL LISTINGS



- DfE Approved (CleanGredients)
- USDA Biopreferred Product
- Whole Foods Market® Premium Body Care™ Ingredient

Suga®Nate 100NC is acceptable for use in Safer Choice-certified products and for listing on CleanGredients as a surfactant. Suga®Nate 100NC also meets criteria for **direct release**.

Suga®Nate 100NC is "Derived Natural" with a Natural Origin Index of 1 in accordance with ISO 16128 guideline.

STORAGE / HANDLING

Suga®Nate 100NC should be stored in closed containers. Frozen material may be thawed in a warm room, venting drums while warming. Shipped in 55 gallon poly drums (net weight 460 lb/208.6 kg). Typical shelf life is 12 months from date of manufacture. Safety Data Sheets may be found at www.colonialchem.com.



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Innovative Specialty Surfactants