



Suga[®]Fax D10NC

100% Natural APG Phosphate Ester

CHEMICAL NAME Sodium Decylglucosides Hydroxypropyl Phosphate
CAS NUMBER 740817-98-5
LISTINGS USA (TSCA); EU (REACH); Canada (NDSL)



Suga[®]Fax D10NC is an ideal starting point for formulators of high-performance industrial cleaners, household cleaners and oilfield cleaners that also feature greener, milder and safer properties. This 100% naturally-derived, mild surfactant has broad regulatory approvals, very mild characteristics for human contact and safe for release in the environment, all while being an effective detergent and hydrotrope.

Suga[®]Fax D10NC is a 100% biobased material as designated by USDA testing protocol. Suga[®]Fax D10NC is also readily biodegradable (OECD 301B) and presents no damage to aquatic life. The mild properties of Suga[®]Fax D10NC in eyes and on skin make it very useful in cleaners where human contact may occur with the cleaning product.



Suga[®]Fax D10NC is stable at all pH ranges for extended periods while providing immediate wetting in water. Suga[®]Fax D10NC can lower the surface tension of 50% and 25% caustic as well as other builder systems, enabling the builder to fully perform in the formulation.

Suga[®]Fax D10NC may be used in household cleaners for hard surface cleaning, oven cleaning, and in extreme clean-up products for pots and pans. It is also suitable for high-performance cleaners in heavy duty industrial applications.

BENEFITS

- 100% biobased, nonpetroleum based
- EO/PO Free
- Readily biodegradable, safe for the environment and humans
- Mild to eyes and skin
- Rapid wetting
- Broad spectrum of pH usage
- Effective detergent and hydrotrope - superior to SXS
- Meets regulatory approvals

APPLICATIONS

- Household spray cleaners
- Oven, grill cleaners
- Acid based etching compounds
- Bottle washing
- Cleaning-in-place formulations
- Paint strippers

TYPICAL PROPERTIES / STRUCTURE

Appearance @ 25°C	Clear Liquid
Solids, %	40
pH (10% aqueous)	7.5
Color, Gardner '98	1

Ross-Miles Foam (1%, 25°C, tap water), mm

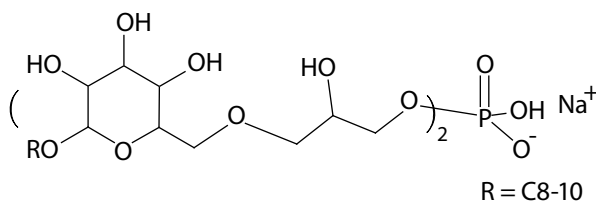
Immediate	155
1 minute	145
5 minute	140

Draves Wetting (1% active), sec

Immediate	Immediate
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Solubility (10% active)

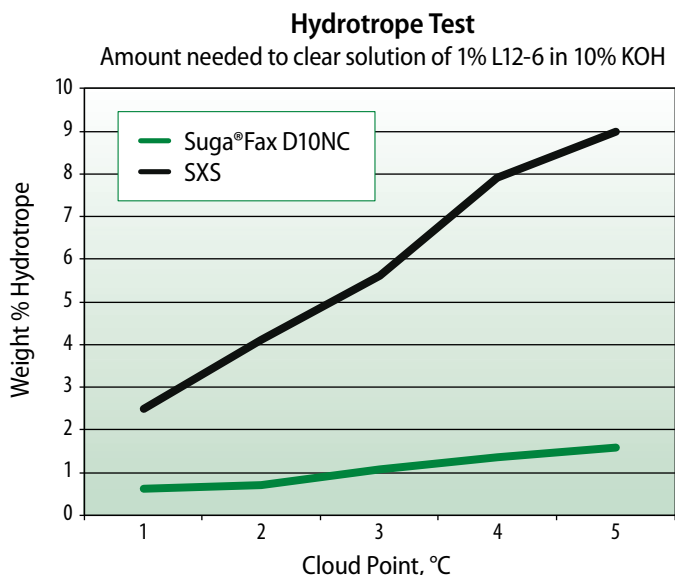
50% NaOH	Soluble
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Patented - #6,627,612

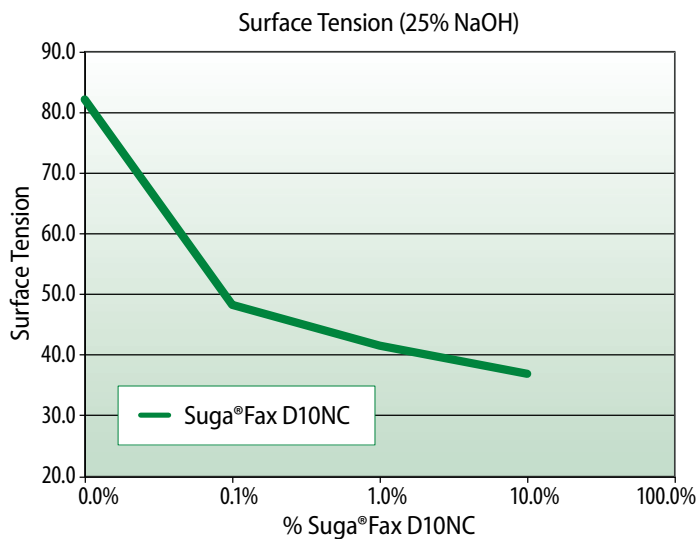
HYDROTROPING

Suga®Fax D10NC shows good hydrotroping capabilities in 10% KOH solution. The graph gives an indication of the relative ability to hydrotrope a nonionic material, compared to Sodium Xylene Sulfonate (SXS).



SURFACE TENSION REDUCTION

50% caustic has a surface tension of 126 dyne/cm; with the addition of 10% Suga®Fax D10NC, surface tension of the mixture was reduced to 45 dyne/cm. The graph shows the surface tension of Suga®Fax D10NC in 25% caustic.



Readily biodegradable per OECD 301 methods. This product meets the criteria for a surfactant under the EU Detergents Regulation (EC) 648/2004.

Suga®Fax D10NC is derived from alkyl polyglucosides, a renewable resource made from coconut oil and corn syrup. These starting materials provide biodegradable, mild surfactants that can function in extreme conditions for a variety of consumer and industrial applications. Because of their safety, Suga®Fax D10NC is excellent in consumer and industrial products, dramatically lowering the risk to human exposure.

FORMULATION

All Purpose Cleaner (Environmentally Friendly) No. 5006

Simple formulation for an extreme clean without any irritation to your skin or eyes and safe for the environment and aquatic life.

INGREDIENT	%
1 Water	qs to 100.00
2 Suga®Fax D10NC / Sodium Decylglucosides Hydroxypropyl Phosphate	5.00
3 Butyl Carbitol™ / Diethylene Glycol Monobutyl Ether	0.50

PROCEDURE:

Combine ingredients in order with adequate mixing between additions.

TYPICAL PROPERTIES:

Appearance: Clear Liquid
pH: 7.0
Viscosity: 20 cP

This product has an ecotoxicological profile that is favorable to OSPAR notification via HOCNF.



USDA Biopreferred Product, rated **100**

STORAGE / HANDLING

Suga®Fax D10NC should be stored in sealed containers at temperatures not exceeding 120°F (49°C). Shipped in 55 gallon poly drums (net weight 450 lb/204 kg). Typical shelf life is 24 months from date of manufacture. Safety Data Sheets may be found at www.colonialchem.com.



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Innovative Specialty Surfactants