



Formulation

USDA No. 5005

4X Ultra Concentrated Natural Liquid Laundry Detergent

DESCRIPTION

Colonial Chemical's natural liquid laundry detergent formulation is free of ethoxylates (1,4-dioxane), alcohols, diethanolamides, lauryl sulfates, laureth sulfates, parabens, and formaldehyde. It is prepared with **Suga®Nate 160NC**, Colonial's 100% natural APG-based surfactant that offers powerful cleaning and unparalleled mildness. The remaining ingredients in the formulation are easily obtainable and derived from natural, renewable resources.

The super-concentrated formulation offers a natural, convenient and powerful stain fighting system that can be used as listed or easily modified.



BENEFITS

- Sulfate-free, 1,4-Dioxane free
- Fights stains, cleans all fabrics without dyes, synthetic fragrances, or optical brighteners
- USDA Certified Biobased **98%***
- Biodegradable
- Hypoallergenic
- Preservative-free
- Globally acceptable
- Very low irritation, safe on sensitive skin
- Designed for standard and HE machines
- Compatible with a wide range of additives for enhanced appearance or performance
- Can be mixed without heat

FORMULATION

Order	INCI Name	Trade Name	%
1	Sodium Laurylglucosides Hydroxypropylsulfonate	Suga®Nate 160NC	60.60
2	Lauramine Oxide	Cola®Lux LO	24.20
3	Decyl Glucoside	Suga®Det D	10.10
4	Propanediol	Zemea® ¹	5.00
5	Citric Acid		qs

PROCEDURE

1. Combine ingredients in order with adequate mixing between additions.
2. Adjust pH to 7.0 – 8.0 with citric acid.

TYPICAL PROPERTIES

Appearance Clear Liquid
 pH 7.0 – 8.0
 Viscosity 450 cps

**Certified Biobased assessment is based on percentages of components in formulation and subject to change if additional ingredients are introduced.*

¹Product of DuPont Tate & Lyle

4X Ultra Concentrated Natural Liquid Laundry Detergent is highly concentrated and designed to produce the best results when measured and used accordingly:

Medium or Small Loads: 3/4 oz.
 Large or Heavily Soiled Loads: 1 oz.

For tough stains, pretreat by pouring liquid laundry detergent directly onto fabric. Rub gently into fabric and soak for five minutes.

SPECIAL NOTE

The finished formulation or variations of the formula are also available in bulk supply for packaging. Please contact Customer Service for pricing and delivery options.

Colonial Chemical, Inc. *Natural Surfactants*

225 Colonial Drive • South Pittsburg, TN 37380 • Phone: 423-837-8800 • Fax: 423-837-3888

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