



# Cola<sup>®</sup>Det DEF-60

Highly Effective Surfactant Blend for Economical Sulfate-Free Formulations

**INCI NAME** Sodium C<sub>14-16</sub> Olefin Sulfonate, Cocamide MIPA, Cocamidopropyl Betaine  
**CAS NUMBER** 68439-57-6, 68333-82-4, 61789-40-0  
**LISTINGS** TSCA (US), DSL (Canada), REACH Pre-Registered (EU), AICS (Australia), IECSC (China), New Zealand (NZIoC)

**Cola<sup>®</sup>Det DEF-60** is a surfactant blend with 40% solids designed for liquid mild cleansing formulations such as shampoos, liquid hand soaps, facial and body washes, and feminine products. Cola<sup>®</sup>Det DEF-60 contains no sulfates, Diethanolamine (DEA), Ethylene Oxide (EO)/1,4-Dioxane and is shipped preservative-free. Cola<sup>®</sup>Det DEF-60 builds high, creamy foam volume with effective viscosity response to salt. The concentrate offers cold mixability and ease of handling for transport, storage and mixing considerations.

## BENEFITS

- Economical liquid surfactant blend for sulfate-free, DEA-free, EO-free formulations
- High-performing, 40% solid surfactant
- DEA, EO-1,4-Dioxane Free
- Solid amide integration offering efficient formulation
- Cold mixability
- Shipped preservative free
- Meets consumers' desire for mildness
- Meets broad regulatory requirements

Based on the biodegradation profile of the individual components, Cola<sup>®</sup>Det DEF-60 is expected to be readily biodegradable.

## APPLICATIONS

- Body washes
- Liquid hand soaps
- Shampoos
- AHA/BHA cleansers
- Feminine products
- Foaming bath products
- Inexpensive consumer products with sulfate-free, DEA-free claims

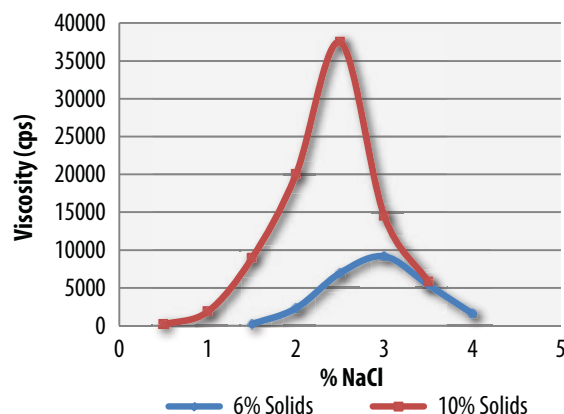


## TYPICAL PROPERTIES

Appearance, 25°C	Clear to Hazy Liquid
pH, 10% aqueous	11.0
Solids, %	41.0
Viscosity	4000 cps
<i>Ross-Miles Foam Height (1% active), mm</i>	
Immediate	200
1 minute	185
5 minutes	175

## VISCOSITY DEVELOPMENT

High, creamy foam volume is effectively generated with salt.



## FOAMING COMPARISON

Cola®Det DEF-60 is capable of developing foam volume similar to sulfate-based systems.

	A	B	C
Colonial SLES-2	12.0	12.0	–
Cola®Teric COAB	1.0	–	–
Cola®Teric CBS	–	0.73	–
Cola®Det DEF-60	–	–	8.9
Water	87.0	87.27	91.1
Ross-Miles Foam Height (as is), mm			
Immediate	195	200	210
1 minute	180	180	190
5 minutes	170	175	180



## FORMULATION

### Luxury Bubble Bath (Sulfate-Free)

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INGREDIENT	%
1 Water	qs to 100.00
2 Cola®Det DEF-60	25.00
3 Glucamate™ LT Thickener (PEG-120 Methyl Glucose Trioleate and Propylene Glycol and Water)	1.50
4 MicroCare® SBB (Benzyl alcohol and Benzoic acid and Sorbic acid)	0.75
5 W.S. Luscious Embrace (Fragrance)	0.50
6 Citric Acid	qs to pH 5.5
7 Sodium Chloride	qs

**Mixing directions:** Combine ingredients 1-5 in order with adequate mixing between additions. Adjust to pH 5.5 with Citric Acid. Adjust to desired viscosity with small amounts of Sodium Chloride.

**Typical Properties:** Appearance: Clear Liquid; pH: 5.5; Viscosity: 7,000 cps

## STORAGE AND HANDLING

Cola®Det DEF-60 should be stored in closed containers. Frozen material may be thawed in a warm room, venting drums while warming. Shelf life is 24 months from date of manufacture. A Safety Data Sheet is available upon request.

## PACKAGING

Cola®Det DEF-60 is shipped in 55 gal. poly drums (net weight 450 lb./204 kg.) or totes.



## Colonial Chemical, Inc.

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

[www.colonialchem.com](http://www.colonialchem.com)

Natural Surfactants