



Cola®Det OE

Triglyceride Emulsifier

- INCI NAME** Sodium Laureth Sulfate (and) Sodium Tridecyl Ether Sulfate (and) Sodium Lauro-amphoacetate (and) Lauramide MIPA
- CAS NUMBER** 9004-82-4, 25446-78-0, 68608-66-2, 142-54-1
- LISTINGS** DSL (Canada); TSCA (US); Australia (AICS); China (IECSC); Philippines (PICCS); }New Zealand (NZIOC); Taiwan (NECI)

Cola®Det OE is a completely formulated system with mild anionic and amphoteric foaming surfactants and a structuring agent. It is prepared and shipped as an easy-to-use lamellar concentrate, and is designed to produce opaque emulsions of typical triglyceride oils without the use of heat. Up to 20 wt. % of an oil can be fully emulsified into water for a stable dispersion. The resulting product can be more fully viscosified with the inclusion of polymeric agents such as guar, xanthan, or cellulosic gums.

Dispersing of polymers into a water phase followed with Cola®Det OE can yield highly viscous, foaming products. Other actives such as humectants, alpha hydroxy acids and proteins can also be added to the aqueous phase. Oil soluble additives such as vitamins, esters, and silicones may be included provided they are soluble themselves in the oil of choice.

Typical formulations utilize triglyceride oils from 5% to 20%. It is recommended to use an equivalent amount of Cola®Det OE. Other oils such as petrolatum and mineral oil can also be used. Mild heat during the mixing phase with adequate homogenization will ensure a uniform stable product.

BENEFITS

- High oil level delivery
- Easily rinsed
- Non-irritating
- Easily fragranced
- Soft after-feel
- Foams in the presence of oils
- Long-term skin conditioning
- Alcohol-free
- Self preserving



APPLICATIONS

- Moisturizing body washes
- Skin cleansers
- Hair repair shampoos
- Color protection shampoos
- Hair moisturizing shampoos
- Other multi-benefit cleansing formulations



TYPICAL PROPERTIES

Appearance, 25°C	Hazy Viscous Liquid
pH, 10% aqueous	8.5
% Solids (2g 1hr @110°C)	50.0
Color, Gardner BYK	4 Max.

Ross Miles Foam Height (1% active), mm

Immediate	200
1 Minute	180
5 Minutes	175

PERFORMANCE TESTING

Cola®Det OE is capable of creating foam in the presence of oils as demonstrated with the following foam test.

Test Formulation

	INGREDIENT	%
1	Water	qs to 100.00
2	Cola®Det OE	20.00
3	Soybean Oil	15.00
4	Chia Oil	5.00
5	N-Hance™ 3215	1.00
6	Citric Acid	qs to pH 5.5 – 6.0

Ross Miles Foam Height (1% active), mm

Immediate	190
1 Minute	170
5 Minutes	160



FORMULATION

Body Wash Crème

No. 2034

This formulation features Cola®Det OE, Cola®Lipid C and Cola®Moist 200 for a creamy body wash that's formulated to moisturize, smooth, and nourish dry skin for an all-day clean. Works great as a soothing shave lotion.

	INGREDIENT	%
A	Water	qs to 100
A	Cola®Det OE	20.00
A	Cola®Lipid C (Cocamidopropyl PG-Dimonium Chloride Phosphate)	2.00
A	Cola®Moist 200 (Hydroxypropyl Bis-Hydroxyethyl-dimonium Chloride)	1.00
B	Soybean Oil (Glycine Soja)	15.00
B	Chia Seed Oil (Salvia Hispanica)	5.00
B	N-Hance™ 3215 (Guar hydroxypropyltrimonium chloride)	1.00
C	Vanilla Fragrance	0.20
C	MicroCare® SB (Sodium Benzoate and Potassium Sorbate)	1.00
C	Citric Acid	qs to pH 5.5 – 6.0

Procedure:

Combine ingredients for Phase A and Phase B in separate vessels. Add Phase B to Phase A with high shear mixing, if possible, taking care to not introduce air. Heat to 40°C and add Phase C ingredients. Adjust pH to 5.5 – 6.0 with citric acid. Mix for 60 minutes.

Typical Properties:

Appearance: Opaque Viscous Liquid

pH: 5.5 – 6.0

Viscosity: 20,000 cP

STORAGE / HANDLING

Cola®Det OE 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 12 months from date of manufacture. Safety Data Sheets may be found at www.colonialchem.com.



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Innovative Specialty Surfactants