



Cola[®]Mulse 3GO

100% All-Natural, Multi-Functional Emulsifier

INCI Polyglyceryl-3 Oleate
CAS 9007-48-1
LISTINGS US (TSCA), Canada (DSL), Australia (AICS), Japan (ENCS), Korea (KECI), China (IECSC/IECIC), Philippines (PICCS), New Zealand (NZIoC), Taiwan (NECI)

Cola[®]Mulse 3GO is a mono-ester of oleic acid and a glycerin polymer containing an average of three glycerin units. It is a multi-functional emulsifier providing stable emulsions in intermediate HLB systems where two or more other emulsifiers might be used. Cola[®]Mulse 3GO requires low usage concentrations of 1.0 - 4.0%. It is capable of creating emulsions with good heat and freeze/thaw stability.

Cola[®]Mulse 3GO is used in a variety of cosmetic and specialized personal care applications, in particular as an emulsifier for W/O creams with brilliant appearance and pleasant properties. It is also useful in cleanser formulations with oil-to-milk or oil-to-lotion transformative properties.

BENEFITS

- Low HLB nonionic emulsifier
- 100% USDA biobased from natural raw materials
- Viscosity modifier
- Foam enhancer
- PEG-free, EO-free
- Easy to handle liquid form
- Outstanding human and environmental safety

APPLICATIONS

- Hand and body lotions
- Oil to Milk cleansers
- Sunscreens
- Sulfate-free shampoo bars
- Luxury body washes



TYPICAL PROPERTIES

Appearance @ 25°C	Clear to Hazy Amber Liquid
% Moisture	0.1
Acid Value, mg KOH/g	2.0
Saponification Number	143.0
Color, Gardner BYK	4
HLB	6

REGULATORY

Listed under 21 CFR 172.854 *Polyglycerol Esters of Fatty Acids*.

Listed under **NATRUE Annex 3**. Cola[®]Mulse 3GO is "Derived Natural" with a **Natural Origin Index of 1.00** in accordance with ISO 16128 guideline.



USDA Biopreferred Product, rated **100**

Natural Glow Hand & Body Cream No. 3015

Cola®Mulse 3GO acts as a skin-conditioning emulsifier and is combined with Cola®Fax CPE to give an elegant, silky rub-out. All-natural, PEG-free emulsifiers create a moisturizer with a creamy texture that leaves skin smooth, hydrated, and velvety soft.

INGREDIENT / INCI	%
A Water	qs to 100.00
A Natrosol™ Plus 330CS / Cetyl Hydroxyethylcellulose	0.25
A KOH, 45% / Potassium Hydroxide	0.60
A Cola®Fax CPE / Cetyl Phosphate	1.00
A Glycerin	2.00
A Cola®Mulse 3GO / Polyglyceryl-3 Oleate	0.50
B Isopropyl Myristate	6.00
B Jarchem™ MCT M-5 / Caprylic/Capric Triglyceride	3.00
B Grapeseed Oil / Vitis Vinifera (Grape) Seed Oil	3.00
B Cetiol® C 5 / Coco-Caprylate	2.50
B Lanette® 16 / Cetyl Alcohol	4.00
C Euxyl® PE 901 / Phenoxyethanol and Ethylhexylglycerin	0.50
C WS Sandalwood / Fragrance	0.10

Opaque Cream, pH 6.0 – 7.0, Viscosity: 150,000 – 200,000 cP

- Disperse Natrosol™ Plus 330CS in water. Mix until uniform, then add potassium hydroxide. Continue mixing until completely hydrated, then heat to 60 – 65°C. Once at temperature, add Cola®Fax CPE. Continue mixing until completely incorporated. Add remaining Phase A ingredients, mixing until uniform. In a separate vessel, combine Phase B ingredients and heat to 60 – 65°C. Once both phases are at temperature, slowly add Phase B to Phase A with good mixing. Cool to 50 – 55°C and homogenize. Continue cooling to 40 – 45°C and add remaining Phase C ingredients. Once uniform, fill containers and allow to cool.

Oil to Milk Cleanser No. 2064

Oil-based face cleanser works to dissolve and lift away impurities without stripping your skin of its natural moisture, leaving it feeling soft and supple. Cola®Mulse 3GO transforms the oil into a creamy milk in the presence of water that nourishes your skin as it cleanses.

INGREDIENT / INCI	%
1 Grapeseed Oil / Vitis Vinifera	79.30
2 Cola®Mulse 3GO / Polyglyceryl-3 Oleate	2.50
3 Jarchem™ MCT M-5 / Caprylic/Capric Triglyceride	15.00
4 Cetiol® C 5 / Coco-Caprylate	3.00
5 Cymbopogon Citratus (Lemongrass) Oil	0.20

Clear Liquid, pH 6.5 – 7.5, Viscosity: <100 cP

- Combine ingredients 1 – 5 in order with moderate mixing. Continue mixing until clear and uniform

Foaming Cream Cleanser No. 2066

This formulation for a foaming cream cleanser is free of sulfates and betaines and easy to formulate with a cold-mixable process. Features mild cleansing and a luxurious pearled appearance, as well as a creamy feel that leaves skin soft and nourished.

INGREDIENT / INCI	%
1 Water	qs to 100.00
Cola®Det DEF-61 / Water, Sodium C14-16 Olefin Sulfonate, Cocamidopropyl Hydroxysultaine, Cocamide MIPA	35.00
Suga®Det EcoPearl / Water and Glycol Distearate and Sodium Hydroxypropylphosphate Decylglucoside Crosspolymer and Cocamidopropyl Hydroxysultaine and Sodium Stearoyl Lactylate	3.00
4 Cola®Mulse 3GO / Polyglyceryl-3 Oleate	0.50
5 Euxyl® K 900 / Benzyl Alcohol and Ethylhexylglycerin and Tocopherol	1.00
6 Fragrance	0.30
7 Citric Acid	qs to pH 6.5 – 7.5

Pearled, Viscous Liquid, pH 6.5 – 7.5, Viscosity: 5,000 – 10,000 cP, % Solids 16.3 – 17.8

- Combine ingredients 1 – 6 in order mixing until uniform. Adjust to pH 6.5 – 7.5 with citric acid.

OTHER LISTINGS



USDA Biopreferred Product, rated 100

STORAGE AND HANDLING

Cola®Mulse 3GO should be stored in closed containers. Shelf life is 24 months from date of manufacture. Cola®Mulse 3GO is shipped in 55-gallon drums, net weight 420 lbs (190.5 kg). Complete Safety Data Sheet may be downloaded at www.colonialchem.com.

Colonial Chemical

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Innovative Specialty Surfactants