



Cola[®]Lipid SAFL

Naturally-Derived Biomimetic Phospholipid

INCI NAME	Linoleamidopropyl PG-Dimonium Chloride Phosphate
CAS NUMBER	83682-78-4
LISTINGS	TSCA (US), DSL (Canada), REACH (EU), AICS (Australia), IECSC & IECIC (China), KECL (Korea), PICCS (Philippines), NZLoC (New Zealand), TSCI (Taiwan)

Cola[®]Lipid SAFL is multifunctional, natural triglyceride organic phospholipid complex. It is designed to mimic natural phospholipids that occur naturally in the body and deposits essential fatty acids on skin. Cola[®]Lipid SAFL is derived from sustainable pure safflower oil and is highly substantive to hair and skin. Safflower oil contains a high level (80%) of linoleic acid, and it provides one of the principal essential fatty acids that is needed to maintain healthy skin. By taking advantage of this oil's unique composition, Cola[®]Lipid SAFL offers a combination of performance properties for personal and health care applications never before achieved with one single ingredient.

APPLICATIONS

Cola[®]Lipid SAFL is non-irritating to the eyes and skin and reduces irritation of anionic activity and can be used in a variety of personal care products, including:

- Creams, lotions, shower gels, facial washes
- Hair care products such as conditioners, shampoos, hair tonics and creams
- Pre- and post-sun care creams, lotions, gels
- Foundations, lipsticks
- Health care products
- Baby products



TYPICAL PROPERTIES

Appearance	Clear Liquid
pH, 10% aqueous	6.5 – 7.5
Solids, %	29.0 – 31.0
% Moisture, K. F.	43.0 – 47.0
Color, Gardner '98	4 Max.



IRRITATION TESTING

Eye Irritation

HET-CAM: Hen's Egg Test chorioallantoic membrane:

Result: Score of **7** (slight ocular irritation potential in vivo)

Acute Skin Irritation

48 Hour occlusive skin patch test - 53 Subjects:

Result: No visible skin reaction, no potential for dermal irritation.

Color Protection Shampoo (Sulfate-Free) No. 1027

This formulation is designed as a sulfate-free, color protection shampoo. Smooths and softens hair without worrying about stripping color.

TRADE NAME / INCI NAME	%
1 Water	qs to 100.00
Cola®Det EQ-18 / Decyl Glucoside, Cocamidopropyl Hydroxysultaine, Cocamidopropyl Betaine, Cocamide MIPA, Disodium Laureth Sulfosuccinate, Disodium Lauryl Sulfosuccinate	30.00
Cola®Lux SAO / Soyamidopropylamine Oxide	3.50
Cola®Lipid SAFL / Linoleamidopropyl PG-Dimonium Chloride Phosphate	1.50
MIRASIL® ADMH-E 125 / Aqua and Propoxytetramethyl Piperidiny Dimethicone and Trideceth-6	1.00
Microcare® SB / Sorbic Acid and Sodium Benzoate	1.00
7 Fragrance	0.15
8 Citric Acid, 50%	qs to pH

PROCEDURE:

Combine ingredients in order until homogeneous. If necessary, heat to 40 – 50°C to clear. Adjust to pH 5.0 – 5.5 with citric acid.

TYPICAL PROPERTIES:

Appearance: Clear Liquid
pH: 5.0 – 5.5
Viscosity: 4,500 cP

Cola®Lipid SAFL is “Derived Natural” with a Natural Origin Index of 0.92 in accordance with ISO 16128 guideline.



Cola®Lipid SAFL contains 92% USDA certified biobased content.

Moisture Lock Conditioner No. 1004

This mild conditioner is formulated to leave hair soft and shiny without weighing it down. Ingredients include Cola®Lipid SAFL for natural conditioning and Cola®Moist 200 to reduce fly-aways. This formulation was tested on bleached brown hair using Dia-Stron Fibra.One and demonstrated improved combability, with an 81% reduction in peak wet hair combing force.

TRADE NAME / INCI NAME	%
1 Water	qs to 100.00
2 Lanette® O / Cetearyl Alcohol	5.00
3 Cola®Lipid SAFL / Linoleamidopropyl PG-Dimonium Chloride Phosphate	5.00
4 Cola®Moist 200 / Hydroxypropyl Bis-Hydroxyethylmonium Chloride	1.00
5 Dow Corning® 556 / Phenyl Trimethicone	1.50
6 Fragrance	0.10
7 Euxyl® PE9010 / Phenoxyethanol and Ethylhexylglycerin	1.00

PROCEDURE:

Heat water to 60°C and add ingredients 2 and 3. Homogenize, then cool to 40 – 45°C. Add remaining ingredients. If necessary, re-homogenize until smooth and uniform.

TYPICAL PROPERTIES:

Appearance: Clear Liquid
pH: 5.5 – 6.5
Viscosity: 20,000 – 25,000 cP

STORAGE / HANDLING

Cola®Lipid SAFL should be stored in closed containers. Frozen material may be thawed in a warm room, venting drums while warming. Shipped in 55 gallon poly drums (net weight 480 lb/217 kg). Typical shelf life is 12 months from date of manufacture. Safety Data Sheets may be found at www.colonialchem.com.



Colonial Chemical
Innovative Specialty Surfactants
www.colonialchem.com