



# Cola®Fax CPE-K MB

Naturally-Derived Emulsifier and Emulsion Stabilizer | Mass Balance RSPO

**INCI** Potassium Cetyl Phosphate  
**CAS** 19035-79-1  
**LISTINGS** US (TSCA), EU (REACH), Canada (NDSL), Australia (AICS), Japan (ENCS), China (IECSC), New Zealand (NZIOC), Taiwan (TCSI)



**Cola®Fax CPE-K MB** is a naturally-derived, excellent water soluble O/W emulsifier and emulsion stabilizer. It can be used as the primary emulsifier, combining with low HLB co-emulsifiers to achieve highly stable emulsions. Cola®Fax CPE-K MB is easily dissolved into the hot water phase during emulsion processing. Cola®Fax CPE-K MB, at low use concentrates, will enhance the stability of any emulsion and at higher concentrations will aid in building viscosity of creams and lotions. It can replace Stearic acid salts in most preparations. Cola®Fax CPE-K MB is ideally suited for use in many dermatological and personal care products providing a silky powdery afterfeel. Cola®Fax CPE-K MB is completely non-irritating to skin.

## APPLICATIONS

### Skin Care

- Facial care
- Body care
- Baby care
- Sun care

### Decorative Cosmetics

- Facial make-up

### Perfumes & Fragrances

- Pre and after shave lotions

## BENEFITS

- Emulsion stabilizer
- Easy to formulate, soluble in hot water
- Can be substituted for polyacrylate-type polymers with improved feel
- Physically easier to use than polyacrylates
- Good rub out and after-feel
- Doesn't inhibit quick-break emulsions
- Can be used as primary emulsifier
- Excellent performance at normal skin pH
- No potassium chloride byproduct



## TYPICAL PROPERTIES

Appearance	White Powder
Acid Value (pH 5.0)	140 - 180
Solids, %	100

## TOXICOLOGICAL PROPERTIES

Dermal Evaluation (3% in water pH 7.0)  
48 Hour Human Patch (25 test subjects)  
• **Result: 25/25 Completely Non-Irritating**

In Vitro Ocular Evaluation  
(3% in water pH 7.0) Ropak, Eytex™ Rapid Membrane Assay - Eytex™ Classification  
• **Result: Minimal/Mild**

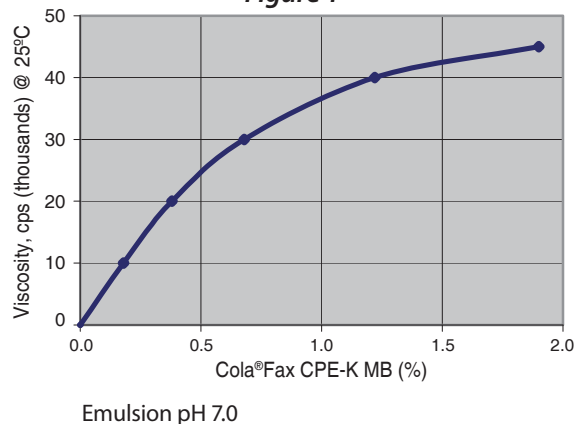
## VISCOSITY RESPONSE

Figure 1 demonstrates the effect Cola®Fax CPE-K MB has on emulsion viscosity. Cola®Fax CPE-K MB will effectively increase viscosity and aid in the stabilization of the emulsion system. Formulations containing Cola®Fax CPE-K MB will display enhanced shear, heat and freeze-thaw stability. Cola®Fax CPE-K MB will also enhance the glossy appearance of cosmetic creams.

## TEST SYSTEM

Ingredients	% by Wt.	Ingredients	% by Wt.
Water	q.s.	Cetyl Alcohol	2.00
Glycerin	5.00	Myristyl Myristate	2.00
<b>Cola®Fax CPE-K MB</b>	.50-2.50	Isopropyl Palmitate	2.00

Figure 1



## Nourishing Baby Lotion

No. 3007

This formulation contains Poly Suga®Mulse D6, Colonial Monolaurin MB, and Cola®Fax CPE-K MB for a silicone free, mild baby lotion. It is nourishing and irritant free with a hint of lavender for calming even the fussiest of babies.

	TRADE NAME / INCI NAME	%
A	Water	qs to 100.00
A	Natrosol® Plus 330 CS / Cetyl Hydroxyethylcellulose	0.50
A	<b>Poly Suga®Mulse D6</b> / Sorbitan Oleate Decylglucoside Crosspolymer	4.00
A	<b>Colonial Monolaurin MB</b> / Glyceryl Laurate	0.50
A	<b>Cola®Fax CPE-K MB</b> / Potassium Cetyl Phosphate	1.00
A	Glycerin	2.00
B	Dermofeel® MCT / Tricaprylin	3.00
B	Cetiol® Ultimate / Undecane and Tridecane	5.00
B	Argan Oil RBD / Argania Spinosa Kernel (Argan) Oil	2.00
B	Lanette® 16 / Cetyl Alcohol	4.00
B	Cetiol® C 5 / Coco-Caprylate	2.50
C	Euxyl® PE 9010 / Phenoxyethanol and Ethylhexylglycerin	0.50
C	Lavender 40/42 Oil / Lavandula Angustifolia (Lavender) Oil	0.05

### PROCEDURE:

In primary vessel, combine Water and Cetyl Hydroxyethylcellulose. Hydrate according to manufacturer instructions. Heat to 70°C while adding remaining phase A ingredients. In a side vessel, combine phase B ingredients. Heat to 70°C. Once both phases are homogeneous and at temperature, add B to A slowly with good mixing. Slowly cool to 50°C and add phase C ingredients. Homogenize and fill containers.

### TYPICAL PROPERTIES:

Appearance: Opaque  
pH: 6.0  
Viscosity: 50,000 cP

### MASS BALANCE RSPO

In keeping with Colonial Chemical's commitment to sustainable raw material sourcing, Cola®Fax CPE-K MB is derived from palm oil that contributes to the production of certified sustainable palm oil. More information on [www.RSPO.org](http://www.RSPO.org).

### ADDITIONAL LISTINGS



COSMOS  
APPROVED



9-2222-17-100-00

Cosmos Approved Raw Material  
Certified Mass Balance (RSPO)

## Natural Argan Oil Body Lotion

No. 3003

This formulation features natural emulsifiers Poly Suga®Mulse D6 and Cola®Fax CPE-K MB along with all-natural emollients and moisturizers to give outstanding moisturization and a luxurious, non-greasy feel. Silicone-free, paraben-free and EO/PO-free.

	TRADE NAME / INCI NAME	%
A	Water	qs to 100.00
A	Natrosol® Plus 330 CS / Cetyl Hydroxyethylcellulose	0.25
A	<b>Poly Suga®Mulse D6</b> / Sorbitan Oleate Decylglucoside Crosspolymer	4.00
A	<b>Cola®Fax CPE-K MB</b> / Potassium Cetyl Phosphate	1.00
A	Glycerin	2.00
B	HallStar® OP / Ethylhexyl Palmitate	3.00
B	HallStar® IPP-NF / Isopropyl Palmitate	6.00
B	Argan Oil RBD / Argania Spinosa Kernel (Argan) Oil	3.00
B	Lanette® 16 / Cetyl Alcohol	4.00
B	Cetiol® C 5 / Coco-Caprylate	2.50
C	Euxyl® K220 / Phenoxyethanol and Ethylhexylglycerin	0.07
C	White Lily / Fragrance	0.10

### PROCEDURE:

In primary vessel, combine Water and Cetyl Hydroxyethylcellulose. Hydrate according to manufacturer instructions. Add remaining phase A ingredients. Heat to 70°C. In a side vessel, combine phase B ingredients. Heat to 70°C. Once both phases are homogeneous and at temperature, add B to A slowly with good mixing. Slowly cool to 50°C and add phase C ingredients. Homogenize and fill containers.

### TYPICAL PROPERTIES:

Appearance: Opaque  
pH: 6.0  
Viscosity: 50,000 cP

Cola®Fax CPE-K MB is "Derived Natural" with a Natural Origin Index of 1.00 in accordance with ISO 16128 guideline.

### STORAGE / HANDLING

**Cola®Fax CPE-K MB** is available in open-head fiber drums (net weight 120 lb/54 kg). Typical shelf life is 24 months from date of manufacture. Safety Data Sheets may be found at [www.colonialchem.com](http://www.colonialchem.com).



**Colonial Chemical**  
Innovative Specialty Surfactants  
[www.colonialchem.com](http://www.colonialchem.com)