

# **EXOsoft PC35**

POTASSIUM COCOATE

### Description

- excellent foam capabilities
- · bright color
- · low odor
- naturally derived
- · preservative free
- excellent choice for sulfate-free formulations
- can be mixed with other anionic, non-ionic or amphoteric surfactant
- primary/secendary surfactant







improvment of Personal Care formulations

**Application** 

liquid hand soaps

• industrial hand soaps

surgical scrub soaps

hard surface cleaners

shampoos

bar soaps





### **EXOsoft PC35**

#### POTASSIUM COCOATE

Chemical name	Fatty acids, potassium salts		
INCI name	Potassium Cocoate		
CAS number	61789-30-8		
Function	Thickener, emulsifier, foaming agent, cleansing agent, moisturizer		
Technical requirements	Appearance at temperature (20÷25)℃	liquid	
	Colour (Gardner units) at (20÷25)°C	max. 3	
	pH of 10% solution product	10.5 - 11.3	
	Dry matter, %(m/m)	34 - 36	
General data	Molecular weight, g/mol	260	
	Solidification point, °C	approx5	
	Viscosity at 25°C, cP	max. 100	
	Density at 20°C, g/mL	approx. 1.03	
	Preservative	none	

# General guideline for EXOsoft PC35 usage

#### How to use EXOsoft PC35 as a primary surfactant?

- recommended pH of the final formulation 9.0-10.0\*
- mix citric acid with water
- introduce EXOsoft PC35 while mixing
- add other anionic and nonionic surfactants while mixing
- · add other additives: active substances, fragrance, preservatives
- · introduce amphoteric surfactants during mixing
- it is recommended to adjust the viscosity to the required values with a Sodium Chloride solution
- \* Some formulations require the pH value below 9.0. In such case it is impossible to obtain a clear product. The pH adjustment should be made by adding Citric Acid in range 0.5-0.8%.

#### How to use EXOsoft PC35 as a secondary surfactant?

- recommended pH of the final formulation: 8.5-9.5
- · mix EXOsoft PC35 with water
- · add other anionic and nonionic surfactants while mixing
- · add other additives: active substances, fragrance, preservatives
- introduce amphoteric surfactants during mixing
- adjust the pH to the required values with a solution of Citric Acid or Lactic Acid use 10-20% solutions
- it is recommended to adjust the viscosity to the required values with a Sodium Chloride solution

# How to use EXOsoft PC35 in preparations where polymers/copolymers of acrylic acids are used?

- mix the rheology modifier (polymers/copolymers of acrylic acids) with water
- adjust the pH with solution of Sodium Hydroxide or Potassium Hydroxide to 7.0 7.5
- introduce anionic and nonionic surfactants while mixing
- introduce EXOsoft PC35 while mixing
- add other additives: active substances, fragrance, preservatives
- introduce amphoteric surfactants during mixing
- adjust the pH to the required values with a solution of Citric Acid (10 20%), Lactic Acid (10-20%), Sodium Hydroxide, Potassium Hydroxide.

## Shaving cream [KD-149]

Phase	INCI name	Brand nai	me	Concentration [%]	Function
Α	Aqua			47.50	solvent
	Acrylates Copolymer			6.00	rheology modifier
В	Potassium Hydroxide			1.00	pH adjuster
С	Ceteareth-25, Cetearyl Alcohol	EXOcare TE25	flakes	4.00	emulsifier
	Palmitic Acid			1.00	rheology modifier
	Stearic Acid			1.00	rheology modifier
D	Magnesium Aluminum Silicate			1.00	rheology modifier
Е	Potassium Cocoate	EXOsoft P	C35	14.00	surfactant
	Sodium Laureth Sulfate	SULFOROKAnd	ol L227/1	13.00	surfactant
	Coco Betaine	ROKAmina	K30B	10.00	surfactant
	Phenoxyethanol, Ethylhexylglycerin			1.00	preservative
	Parfum			0.50	fragrance
		APPEARANCE pH STABILITY	visual m	nethod n in 5°C, 20°C, 40°C	creamy emulsion 7.5 – 8.5 confirmed

- **1.** In a main vessel combine ingredients from phase A mix until uniform. Add Potassium Hydroxide mix until uniform.
- **2.** In a separate vessel combine ingredients from phase C. Heat the phase A and C up to 75-80°C (separately).
- **3.** Add phase C to A while mixing. Homogenize
- with 2500-3500 RPM, 90 sec. Add Magnesium Aluminum Silicate (phase D) homogenize with 2500-3500 RPM, 90 sec.
- **4.** Prepare the remaining ingredients in separate beakers.
- **5.** Cool the batch down to 25°C while mixing. Add phase E ingredients while.

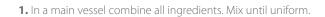
## Shower gel [KD-107]

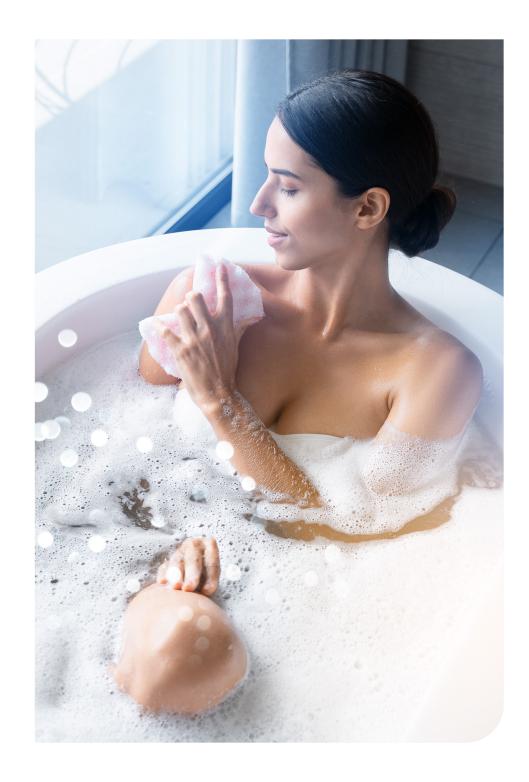
Phase	INCI name	Brand name	Concentration [%]	Function
Α	Aqua		67.00	solvent
	Potassium Cocoate	EXOsoft PC35	16.00	surfactant
	Cocamide DEA	ROKAmid KAD	1.50	surfactant
В	Cocamidopropyl Betaine	ROKAmina K30K	7.00	surfactant
С	Parfum		0.50	fragrance
D	Betaine		1.00	active
Е	Sodium Chloride		2.00	thickener
	Aqua		5.00	solvent
1111	APPEARANCE pH VISCOSITY [cP] STABILITY	visual method  Brookfield LV, spindle 34, speed 2.5 RPM, T:25°C  1 month in 5°C, 20°C, 40°C		transparent gel 8.0 – 9.0 min. 1000 confirmed

- 1. In a vessel combine ingredients from phase A mix until uniform.
- **2.** Add ingredients from phase B-D while mixing mix until uniform. In a separate vessel combine ingredients from phase E mix until uniform.
- **3.** Add slowly phase E while mixing mix until uniform.

# Shaving foam [KD-150]

Phase	INCI name	Brand r	name	Concentration [%]	Function
Α	Aqua			up to 100	solvent
	Glycerin			2.50	moisturising agent
	Pentylene Glycol			2.50	moisturising agent
	Allantoina			0.10	active
	Potassium Cocoate	EXOsoft	PC35	30.00	surfactant
	Cocamidopropyl Betaine	ROKAmi	na K30	5.00	surfactant
	Phenoxyethanol, Methylparaben, Ethylparaben, Propylparaben			0.40	preservative
	АР	PEARANCE pH STABILITY	visual me	ethod at 5°C, RT, 40°C	bright-yellow liquid 8.5 – 10.0 confirmed





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