EXOsoft MG / EXOsoft MGB

MAGNESIUM LAURETH SULFATE

Description

- more gentle to skin than SLS and SLES
- better solubility in oils than sodium salt
- good thickening ability in the presence of salt
- more stable foam than sodium salt
- biodegradable

Application

- shampoos
- shower gels, liquid soaps
- face washing gels, make-up remover liquids
- baby care preparations
- preparations for personal hygiene

in line with cosmetic trends

guarantee the consumer satisfaction

improvment of Personal Care formulations

innovative product

value for money

EXOsoft MG
MAGNESIUM LAURETH SULFATE

Chemical name	Alcohols C12-14, ethoxylated, sulfated, magnesium salts	
INCI name	Magnesium Laureth Sulfate	
CAS number	62755-21-9	
Function	Emulsifier, foaming and cleaning agent	
Technical requirements	Appearance at (20÷25)°C	clear liquid
	Active substance, % (m/m)	25 ÷ 27
	pH of 10% solution	6.0 ÷ 7.5
	Klett colour, Klett value	max. 100
	Unsulphated substances, % (m/m)	max. 2.0
	Magnesium sulphate (VI), % (m/m)	max. 1.0
General data	Solubility in water	unlimited
	Molecular weight, g/mol	approx. 442
	Density at 20°C, g/mL	approx. 1.05
	Preservative	100 ppm MIT

EXOsoft MGB
MAGNESIUM LAURETH SULFATE

Chemical name	Alcohols C12-14, ethoxylated, sulfated, magnesium salts	
INCI name	Magnesium Laureth Sulfate	
CAS number	62755-21-9	
Function	Emulsifier, foaming and cleaning agent	
Technical requirements	Appearance at (20÷25)°C	clear liquid
	Active substance, % (m/m)	25 ÷ 27
	pH of 20% solution	4.0 ÷ 5.5
	Klett colour, Klett value	max. 100
	Unsulphated substances, % (m/m)	max. 2.0
	Magnesium sulphate (VI), % (m/m)	max. 1.0
General data	Solubility in water	unlimited
	Molecular weight, g/mol	approx. 442
	Density at 20°C, g/mL	approx. 1.05
	Preservative	0.3% benzoic acid

Gel for intimate hygiene (KD-02)

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua		up to 100	solvent
	Sodium Benzoate, Potassium Sorbate		0.50	preservative
	Betaine		1.00	active substance
	Glycerin		1.00	solvent
	Lactic Acid		q.s	pH adjuster
B	**Sodium Laureth Sulfate**	**SULFOROKAnol L227/1**	**12.00**	**surfactant**
	PEG-7 Glyceryl Cocoate	**ROKAcet KO300G**	**0.50**	**surfactant**
	Magnesium Laureth Sulfate	**EXOsoft MG / EXOsoft MGB**	**6.00**	**surfactant**
C	Parfum		0.25	fragrance
D	**Coco Betaine**	**ROKAmina K30B**	**9.00**	**surfactant**

APPEARANCE	visual method	transparent viscosus liquid
pH		4.0 - 4.5
VISCOSITY [cP]	Brookfield LV, spindle 34, speed 6.0 RPM, T: 25°C	1000–7000
STABILITY	1 month in 5°C, 20°C, 40°C,	confirmed

1. In a main vessel combine ingredients from phase A. Add ingredients from phase A to warm water (40-45°C). Mix until uniform.
2. Add ingredients from phase B. Mix until uniform. Cool the batch down to at least 30°C.
3. Add Parfum while mixing. Mix until uniform.
4. Add slowly Coco Betaine while mixing. Mix until uniform.
5. If nesesery, adjust pH by lactic acid to 4.0 - 4.5.

Gel for intimate hygiene (KD-04)

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua		up to 100	solvent
	MEA Lauryl Sulfate	**ROSULfan M**	**18.00**	**surfactant**
	Magnesium Laureth Sulfate	**EXOsoft MG / EXOsoft MGB**	**4.00**	**surfactant**
	Glycerin		1.00	solvent
	PEG-7 Glyceryl Cocoate	**ROKAcet KO300G**	**1.00**	**surfactant**
	Decyl Glucoside		0.50	surfactant
	Sodium Benzoate, Potassium Sorbate		0.50	preservative
B	**Coco Betaine**	**ROKAmina K30B**	**6.00**	**surfactant**
	Parfum		0.25	fragrance
C	Lactic Acid		q.s	pH adjuster

APPEARANCE	visual method	bright-yellow gel
pH		4.0-4.5
VISCOSITY [cP]	Brookfield LV, spindle 34, speed 2.5 RPM, T: 25°C	2000-7000
STABILITY	1 month in 5°C, 20°C, 40°C,	confirmed

1. Combine ingredients from phase A. Add ingredients from phase A to water (25-30°C). Mix until homogenous solution is obtained.
2. Add slowly Coco Betaine and Parfum while mixing. Mix until uniform.
3. If necessary, adjust pH by lactic acid to 4.0 – 4.5.

Foam for intimate hygiene (KD-07)

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua		up to 100	solvent
	Glycerin		4.00	solvent
	Magnesium Laureth Sulfate	**EXOsoft MG / EXOsoft MGB**	**4.00**	**surfactant**
	Disodium Laureth Sulfosuccinate	**EXOsoft L3/40**	**4.00**	**surfactant**
	Betaine		0.50	active
	Sodium Benzoate, Potassium Sorbate		0.50	preservative
	Lactic Acid		q.s	pH adjuster
B	Panthenol		0.10	active
	PEG-120 Methyl Glucose Dioleate		0.25	thickener
C	**Cocamidopropyl Betaine**	**ROKAmina K30**	**2.00**	**surfactant**
	Parfum		0.20	fragrance

APPEARANCE	visual method	bright-yellow liquid
pH		4.0 – 4.5
STABILITY	1 month in 5°C, 20°C, 40°C,	confirmed

1. In a main vessel combine ingredients from phase A. Add ingredients from phase A to warm water (40-45°C). Mix until uniform.
2. Add PEG-120 Methyl Glucose Dioleate and Panthenol. Mix until uniform. Cool the batch down to at least 30°C.
3. Add Cocamidopropyl Betaine and Parfum during mixing. Mix until uniform.
4. If nessesery, adjust pH by lactic acid to 4.0 – 4.5

Bathing liquid for infants (KD-26)

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua		up to 100	solvent
	Lauryl Glucoside		2.00	surfactant
	Glycerin		2.00	solvent
	Betaine		0.50	active
	Sodium Benzoate, Potassium Sorbate		0.50	preservative
	Lactic Acid		q.s	pH adjuster
B	**Magnesium Laureth Sulfate**	**EXOsoft MG / EXOsoft MGB**	**12.00**	**surfactant**
	PEG-7 Glyceryl Cocoate	**ROKAcet KO300G**	**0.50**	**surfactant**
	PEG-120 Methyl Glucose Dioleate		0.80	thickener
C	**Cocamidopropyl Betaine**	**ROKAmina K30**	**6.00**	**surfactant**

APPEARANCE	visual method	light-yellow liquid
pH		4.8–5.3
VISCOSITY [cP]	Brookfield LV, spindle 34, speed 10 RPM, T: 25°C	1000-3000
STABILITY	1 month in 5°C, 20°C, 40°C,	confirmed

1. Combine ingredients from phase A. Add ingredients from phase A to warm water (50-55°C). Mix until homogenous solution is obtained. Cool the batch down to at least 50°C.
2. Add ingredients from phase B while mixing. Mix until uniform. Cool the batch down to at least 30°C.
3. Add Cocoamidopropyl Betaine during mixing. Mix until uniform.

Gel for washing skin face (KD-62)

Phase	INCI name	Brand name	Concentration [%]	Function
A	Acrylates/C10-30 Alkyl Acrylate Crosspolymer		0.90	rheology modifier
	Aqua		40.00	solvent
B	Aqua		39.1488	solvent
	Sodium Laureth Sulfate	**SULFOROKAnol L270/1**	**up to 100**	**surfactant**
	Magnesium Laureth Sulfate	**EXOsoft MG / EXOsoft MGB**	**4.00**	**surfactant**
	Betaine		2.00	active
	PEG-75 Lanolin	**ROKAnol LN75/50**	**1.00**	**surfactant**
	Glycerin		1.00	solvent
	CI 17200		0.0012	colorant
	Benzophenone-4		q.s	UV filter
C	Phenoxyethanol, Ethylhexylglycerin		1.00	preservative
	Parfum		0.30	fragrance
	Cocamidopropyl Betaine	**ROKAmina K30**	**3.00**	**surfactant**
D	Sodium Hydroxide		q.s	pH adjuster

APPEARANCE	visual method	pink, pearly gel
pH		5.0 –6.0
VISCOSITY [cP]	Brookfield LV, spindle 34, speed 2.5 RPM, T: 25°C	18000 - 22000
STABILITY	1 month in 5°C, 20°C, 40°C,	confirmed

1. Pour the deionized water (25-30°C) in to the main vessel and add the Acrylates/C10-30 Alkyl Acrylate Crosspolymer. Start mixing when the polymer is completely wetted. Mix until the homogenous solution is obtained. Homogenise for 1-2 minutes.
2. Combine ingredients from phase B in a separate vessel. Heat up to 40-45°C with gentle agitation. Mix until homogenous solution is obtained.
3. Add slowly phase B to phase A while mixing. Mix until uniform.
4. Add Preservative, Cocamidopropyl Betaine and Parfum while mixing. Mix until uniform.
5. Add slowly Sodium Hydroxide while mixing. Mix until uniform.

Intimate hygiene liquid (PHI-01)

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua		31.50	solvent
	Magnesium Laureth Sulfate	**EXOsoft MGB**	**50.00**	**primary surfactant**
	PEG-7 Glyceryl Cocoate	**ROKAcet KO300G**	**1.00**	**re-oiling agent**
	Decyl Glucoside		5.00	secondary surfactant
	Citric acid		0.20	pH modifier
	Parfum		0.50	frangrance composition
	Benzyl Alcohol, Benzoic Acid, Dehydroacetic Acid, Tocopherol		1.00	preservative
B	**Cocamidopropylbetaine**	**ROKAmina K30**	**8.50**	**secondary surfactant**
C	Sodium chloride		2.30	viscosity modifier

APPEARANCE	visual method	clear, viscosus gel
pH		4.0-4.5
VISCOSITY [cP]	Brookfield LV, spindle 34, speed 2.5 RPM, T: 25°C	2000-5000
STABILITY	1 month in 5°C, 20°C, 40°C,	confirmed

1. Combine ingredients from phase A. Add ingredients from phase A to warm water (40-45°C). Mix until homogenous solution is obtained.
2. Cool the batch down to at least 35°C
3. Add parfum, preservative and cocamidopropylbetaine during mixing. Mix until homogenous solution is obtained.
4. If necessary, add sodium chloride to adjust the viscosity.
5. If necessary, adjust pH by citric acid to 4.0-4.5.

Mild baby shampoo without salt addition (SZ-06)

Phase	INCI name	Brand name	Concentration [%]	Function
A	Aqua	–	up to 100	solvent
	Sodium Benzoate. Potassium Sorbate	–	0.60	preservative
	Magnesium Laureth Sulfate	**EXOsoft MGB**	**17.70**	**primary surfactant**
	PEG-75 Lanolin	**ROKAnol LN 75/50**	**1.00**	**moisturising agent**
	MEA Lauryl Sulfate	**ROSULfan M**	**10.00**	**primary surfactant**
B	PEG-120 Methyl Glucose Dioleate	–	1.50	viscocity modifier
C	**Cocamidopropylbetaine**	**ROKAmina K30**	**6.50**	**secondary surfactant**
	Parfum	–	0.30	fragrance
	Citric acid	–	q.s.	pH modifier

APPEARANCE	visual method	clear, slightly yellow gel
pH		5.0 - 5.5
VISCOSITY [cP]	Brookfield LV, spindle 34, speed 2,5 RPM, T: 25°C	1500-5000
STABILITY	1 month in 5°C, 20°C, 40°C,	conforms

1. Combine ingredients from phase A. Add ingredients from phase A to warm water (55-60°C). Mix until homogenous solution is obtained.
2. Add PEG-120 Methyl Glucose Dioleate during mixing. Mix until uniform.
3. Cool the batch down to 35°C.
4. Add parfum and cocamidopropylbetaine during mixing. Mix until uniform.
5. If necessary, adjust pH by citric acid to 5.0-5.5.

www.products.pcc.eu

PCC Exol