CLARIANT

Discover a new Sensory Dimension in Hair Care

GLUCOTAIN®

Uncover the
SECRET CODE
OF BEAUTY

what is precious to you?

DISCOVER GLUCOTAIN®
A NEW SENSORY DIMENSION

GlucoTain's innovative sugar-based surfactants indulge the senses through a range of individual foam structures – from fluffy to rich and light to caring, in skin and hair products. This renewable surfactant range embraces mildness without compromising on cleansing, and is ideal for new platforms and sulfate-free formulations.

GlucoTain® is suitable for hair and skin cleansing applications such as shampoos, shower gels, soaps, facial cleansers and shaving foams.

GLUCOTAIN® **CLEAR**
Feel The Boost Of Freshness

GLUCOTAIN® **PLUS**
Feel The Sensation Of Foam

GLUCOTAIN® **FLEX**
Feel The Freedom Of Flexibility

GLUCOTAIN® **CARE**
Feel The Pleasure Of Indulgence

GLUCOTAIN® CLEAR

Vegetable origin
94% RCI
RSPO certified

GlucoTain® Clear is our EO- and PEG-free hero for fresh and light solutions. This surfactant offers formulations a boost with fluffy foam, solubilizing properties and a pleasant clean after feel. Especially suitable for normal hair, GlucoTain® Clear is recommended for refreshing, vitalizing shampoos and 2-in-1 shower and hair products.

DESCRIPTION

INCI Declaration	Capryloyl/Caproyl Methyl Glucamide
Origin	Coconut/Palm (RSPO)
Active concentration (%)	50
Appearance, at 25°C	Liquid
Melting point, °C	10
Preservative	–
pH	8.0 – 9.5
ECOTAIN®	Vegetable origin, 94% RCI (Renewable Carbon Index), GMO-free, RSPO certified Palm Oil, No eco-tox labeling under GHS

TECHNICAL SPOTLIGHT

Sulfate-free the easy way

Ph.	Ingredient	INCI	As supplied (%)
A	Water	Aqua	ad 100
	Sodium Benzoate	Sodium Benzoate	0.45
	Sodium Citrate	Sodium Citrate	0.50
B	**Genagen® KB**	Coco-Betaine	**6.67**
	Jaguar® C-162	Hydroxypropyl Guar Hydroxypropyltrimonium Chloride	0.20
	Water	Aqua	10.00
C	**Hostapur® OS Liquid**	Sodium C_{14-16} Olefin Sulfonate	**14.28**
	Fragrance Selenium	Fragrance	0.3
D	**GlucoTain® Care**	Cocoyl Methyl Glucamide	**10.00**
	GlucoTain® Clear	Capryloyl/Caproyl Methyl Glucamide	**1.00**
E	Citric Acid 25%	Citric Acid	q.s. to pH 4.6 - 4.8

SENSORY

- Light and fluffy foam
- Clean and fresh after feel

KEY BENEFIT

- Hair vitality and freshness

FEATURES

- Good solubilizing properties for perfumes, essential oils & preservatives
- Suitable for EO- and PEG-free formulations
- Salt-free

APPLICATIONS

- Refreshing & vitalizing shampoos, for men shampoos, 2-in-1 shower & hair products

Procedure

I Mix the components of A (magnetic stirrer)
II In a separate beaker combine water with Jaguar and shake carefully, then add Genagen KB and stir until dissolved. Add to I
III In a separate beaker mix the components of C until the Fragrance is solubilized. Add to II
IV Pre-melt GlucoTain Care with a temperature of approx. 35°-40°, add to the mix and stir until homogenous (magnetic stirrer), add GlucoTain Clear
V Finally adjust the pH with E to 4.6 - 4.8

Viscosity (Brookfield, 20°C, 20 rpm)
- 6220 mPas

pH
- Approx. 4.7

Appearance
- Slightly yellow, clear shampoo

GLUCOTAIN® PLUS

Vegetable origin
94% RCI
RSPO certified

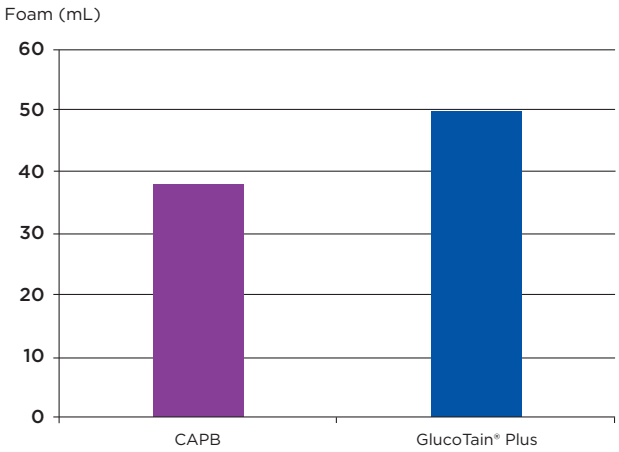
GlucoTain® Plus is our passionate lathering cleanser. With its light and abundant foam, it makes hair cleansing truly enjoyable. Especially suitable for oily and greasy hair, GlucoTain® Plus is recommended for deep cleansing and anti-dandruff shampoos.

DESCRIPTION

INCI Declaration	Capryloyl/Caproyl Methyl Glucamide (and) Lauroyl/ Myristoyl Methyl Glucamide
Origin	Coconut/Palm (RSPO)
Active concentration (%)	50
Appearance, at 25°C	Liquid
Melting point, °C	18
Preservative	-
pH	8.5 - 9.5
ECOTAIN®	Vegetable origin, 94% RCI (Renewable Carbon Index), GMO-free, RSPO certified Palm Oil, No eco-tox labeling under GHS

TECHNICAL SPOTLIGHT

GlucoTain® Plus provides superior foam in presence of silicone oils



Instrumental test: Foam shaking with graduated cylinder. Test shampoo with 1.5% dimethicone, diluted to 1% surfactant.

SENSORY

- Light and abundant

KEY BENEFIT

- Hair lathering, even in presence of oils

FEATURES

- High flash foam
- Can be used as a primary surfactant
- Enables cold stable SLS/ALS systems
- Salt-free

APPLICATIONS

- Deep cleansing and anti-dandruff shampoos

GLUCOTAIN® FLEX

Vegetable origin
95% RCI
RSPO certified

GlucoTain® Flex is our versatile solution offering freedom when formulating. It supports the development of sulfate-free and CAPB-free formulations, and and keeps your color safe. With its creamy foam, it leaves a smooth after feel. Especially suitable for fine, damaged and colored hair, GlucoTain® Flex is recommended for volume, anti-aging and color protecting shampoos.

DESCRIPTION

INCI Declaration	Lauroyl/Myristoyl Methyl Glucamide
Origin	Coconut/Palm (RSPO)
Active concentration (%)	35
Appearance, at 25°C	Paste
Melting point, °C	32
Preservative	0.8% Sorbic Acid
pH	4.8 - 6.8
ECOTAIN®	Vegetable origin, 95% RCI (Renewable Carbon Index), GMO-free, RSPO certified Palm Oil, No eco-tox labeling under GHS

SENSORY

- Creamy foam
- Smooth after feel

KEY BENEFIT

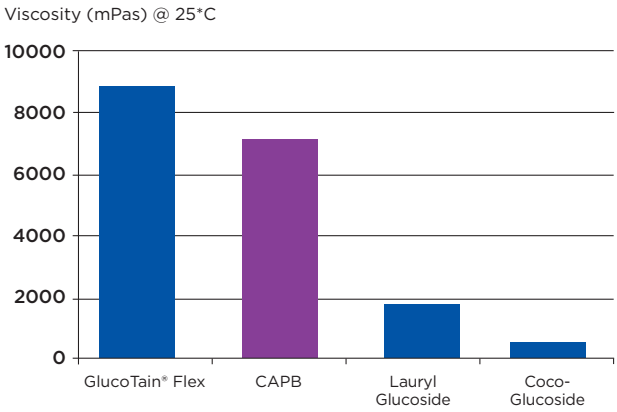
- Easier combing
- Color safe

FEATURES

- More efficient thickener
- Synergistic effect with conditioning agents
- Reduces the need for polycationics
- Enables mild CAPB- and/or sulfate-free formulations

TECHNICAL SPOTLIGHT

GlucoTain® Flex is a more efficient thickener



10 % SLES, 2 % Co-surfactant, 3 % NaCl

APPLICATIONS

- Color protection shampoos, volume shampoos, anti-ageing shampoos, baby shampoos

GLUCOTAIN® CARE

Vegetable origin
95% RCI
RSPO certified

GlucoTain® Care is the most tender in our surfactant family. With its rich and creamy foam, it still remains easy to rinse off for an overall caring experience. Especially suitable for dry and damaged hair, GlucoTain® Care is recommended for conditioning, repair and baby shampoos.

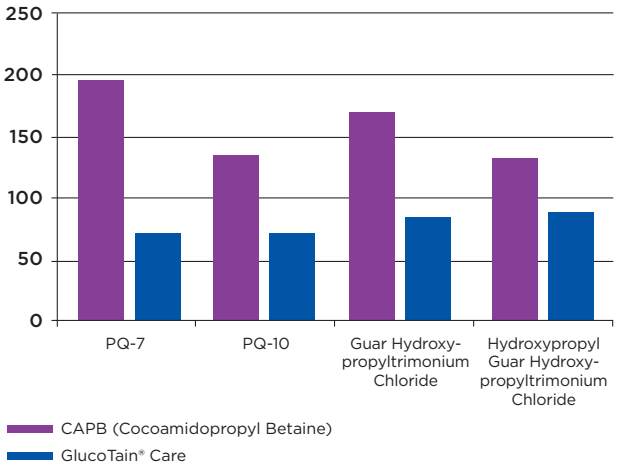
DESCRIPTION

INCI Declaration	Cocoyl Methyl Glucamide
Origin	Coconut Oil
Active concentration (%)	40
Appearance, at 25°C	Paste
Melting point, °C	32
Preservative	0.6% Sorbic Acid
pH	5.0 – 7.0
ECOTAIN®	Vegetable origin, 95% RCI (Renewable Carbon Index), GMO-free, No eco-tox labeling under GHS

TECHNICAL SPOTLIGHT

Excellent synergistic and conditioning effect

Maximum combing force on damaged hair, dry combing (gmf)



SENSORY

- Rich and creamy foam
- Caring after feel

KEY BENEFIT

- Easier combing

FEATURES

- Synergism with cationic polymers
- Sulfate- and EO-free
- Salt-free

APPLICATIONS

- Repair shampoos, baby shampoos, everyday shampoos

INSPIRING FORMULATIONS

WALK ON THE MILD SIDE

Ph.	Ingredient	INCI	As supplied (%)
A	Water	Aqua	ad 100
	Sodium Benzoate	Sodium Benzoate	0.45
	Sodium Citrate	Sodium Citrate	0.50
	Sorbitol	Sorbitol	1.00
B	**Genagen® CAB 818**	Cocamidopropyl Betaine	**14.10**
	Jaguar® C-162	Hydroxypropyl Guar Hydroxypropyltrimonium Chloride	0.20
	Water	Aqua	10.00
C	Water	Aqua	10.00
	Hostapon® SCI-85 G	Sodium Cocoyl Isethionate	**5.52**
D	**Hostapon® CCG**	Sodium Cocoyl Glutamate	**7.12**
	Fragrance Waterlily	Fragrance	0.50
E	**GlucoTain® Flex**	Lauroyl/Myristoyl Methyl Glucamide	**12.09**
	Perlogen® SF 3000	Aqua (and) Glycol Distearate (and) Laureth-4 (and) Cocamidopropyl Betaine	**1.30**
F	Citric Acid 25%	Citric Acid	q.s pH to 4.9-5.1

Procedure

I Mix the components of A (magnetic stirrer)
II In a separate beaker combine water with Jaguar and shake carefully, then add Genagen CAB 818 and stir until dissolved, add to I
III In a separate beaker mix Hostapon SCI 85 G with hot water (approx. 60-70°C) and stir with a magnetic stirrer until dissolved. Allow to cool down to RT
IV In a separate beaker combine the components of D and stir until the fragrance is solubilized. Add to cooled III
V Add IV to II
VI Add the components of E one after another to V and stir in between until homogenous (with GlucoTain Flex being pre-molten at 35°-40°C)
VII Finally adjust the pH with F to 4.9-5.1

Viscosity (Brookfield, 20°C, 20 rpm)

- 10220 mPas

pH

- Approx. 5.10

Appearance

- Pearlized shampoo

Stability

- 12 weeks @ RT and 40°C

Challenge Test (EP)

- Pass

SULFATE FREE THE EASY WAY

Ph.	Ingredient	INCI	As supplied (%)
A	Water	Aqua	ad 100
	Sodium Benzoate	Sodium Benzoate	0.45
	Sodium Citrate	Sodium Citrate	0.50
B	**Genagen® KB**	Coco-Betaine	**6.67**
	Jaguar® C-162	Hydroxypropyl Guar Hydroxypropyltrimonioum Chloride	0.20
	Water	Aqua	10.00
C	**Hostapur® OS Liquid**	Sodium C_{14-16} Olefin Sulfonate	**14.28**
	Fragrance Selenium	Fragrance	0.3
D	**GlucoTain® Care**	Cocoyl Methyl Glucamide	**10.00**
	GlucoTain® Clear	Capryloyl/Caproyl Methyl Glucamide	**1.00**
E	Citric Acid 25%	Citric Acid	q.s. to pH 4.6 - 4.8

Procedure

I Mix the components of A (magnetic stirrer)
II In a separate beaker combine water with Jaguar and shake carefully, then add Genagen KB and stir until dissolved, add to I
III In a separate beaker mix the components of C until the fragrance is solubilized. Add to II
IV Pre-melt GlucoTain Care with a temperature of approx, 35°-40°, add to the mix and stir until homogenous (magnetic stirrer), add GlucoTain Clear
V Finally adjust the pH with E to 4.6 - 4.8

Viscosity (Brookfield, 20°C, 20 rpm)

- 6220 mPas

pH

- Approx. 4.7

Appearance

- Slightly yellow, clear shampoo

Stability

- 12 weeks @ RT and 40°C

Challenge Test (EP)

- Pass

NOURISHING REPAIR SHAMPOO

Ph.	Ingredient	INCI	As supplied (%)
A	Water	Aqua	to 100
	Carbopol® Ultrez 21	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.40
B	**Genapol® LRO liq**	Sodium Laureth Sulfate	**37.00**
C	**GlucoTain® Care**	Cocoyl Methyl Glucamide	**5.00**
	XIAMETER® PMX 200 5cst	Dimethicone	0.10
	Plantasens® Abyssinian Oil	Crambe Abyssinica Seed Oil	**0.20**
	Fragrance	Fragrance (AVOCADO)	0.30
D	Water	Aqua	20.00
	Jaguar® C-162	Hydroxypropyl Guar Hydroxy-propyltrimmonium Chloride	0.10
E	NaOH/ Citric Acid	NaOH/ Citric Acid	q.s. pH 5.5
F	Water	Aqua	4.00
	Sodium Benzoate	Sodium Benzoate	0.45
G	**Perlogen® SF 117**	Aqua (and) Glycol Distearate (and) Laureth-4	**5.00**
H	FD&C Violet2	CI 60730	0.002
I	NaCl	Sodium Chloride	2.00

Procedure

I Sprinkle Carbopol on the surface of the water. When fully hydrated, stir for 30 min (50 rpm)
II Add phase B to A and stir until solubilised (100 rpm)
III In a separate beaker, combine ingredients of phase C and stir until clear (100 rpm), add to mix
IV Add the remaining phases in the above order while stirring (100 rpm)
V Adjust pH to 5.5 with phase E while stirring (100 rpm)
VI Adjust viscosity with phase I while stirring slowly (50 rpm)

Viscosity (Brookfield, 20°C, 20 rpm)

- 5700 mPas

pH

- Approx. 5.3

Appearance

- White creamy

Stability

- 12 weeks @ RT and 40°C

Challenge Test (EP)

- Pass

COLOR PROTECT CONDITIONING SHAMPOO

Ph.	Ingredient	INCI	As supplied (%)
A	Water	Aqua	to 100
	Carbopol Ultrez 21	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.40
B	**Genapol® LRO liq**	Sodium Laureth Sulfate	**37.00**
C	**GlucoTain® Flex**	Lauroyl/Myristoyl Methyl Glucamide	**5.70**
	Hostapon® SCI 85 C	Sodium Cocoyl Isethionate	**3.30**
D	Water	Aqua	10.00
	Jaguar® C-162	Hydroxypropyl Guar Hydroxy-pro-pyltrimmonium Chloride	0.20
E	**SilCare® Silicone SEA**	Trideceth-9 PG-Amodi-methicone and Trideceth-12	**0.50**
F	Water	Aqua	2.00
	Uvinul® MS40	Benzophenone-4	0.20
G	NaOH/ Citric Acid	NaOH/ Citric Acid	q.s. pH 5.5
H	Water	Aqua	4.00
	Sodium Benzoate	Sodium Benzoate	0.45
I	**Perlogen® SF 117**	Aqua (and) Glycol Distearate (and) Laureth-4	**3.80**
	Fragrance Sophia	Fragrance	0.20
	FD&C Red	CI 14700	0.001
J	NaCl	Sodium Chloride	2.25

Procedure

I Sprinkle Carbopol on the surface of the water. When fully hydrated, stir for 30 min (50 rpm)
II Add phase B to A and stir until solubilised (100 rpm)
III In a separate beaker, combine ingredients of phase C and heat to 60°C until clear (200 rpm), add to mix
IV Allow formulation to cool down to 40°C and add the remaining phases in the above order while stirring
V Adjust pH to 5.5 with phase G while stirring (100 rpm)
VI Adjust viscosity with phase J while stirring slowly (50 rpm)

Viscosity (Brookfield, 20°C, 20 rpm)

- 4300 mPas

pH

- Approx. 5.4

Appearance

- Pink pearlescent shampoo

Stability

- 12 weeks @ RT and 40°C

Challenge Test (EP)

- Pass

RELAXED MOOD SHAMPOO

Ph.	Ingredient	INCI	As supplied (%)
A	Jaguar® C 162	Hydroxypropyl Guar Hydroxypropyltrimonium Chloride	0.15
	Citric Acid 10%	Citric Acid	0.15
	Water	Aqua	20.00
B	Water	Aqua	40.00
	Natural Rose Flower Water	Rosa Damascena Flower Water	5.00
	Genapol® LRO paste	Sodium Laureth Sulfate	**10.15**
	Genagen® KB	Coco-Betaine	**5.10**
	GlucoTain® Flex	Lauroyl/Myristoyl Methyl Glucamide	**5.50**
C	Water	Aqua	10.28
	Sodium Chloride	Sodium Chloride	0.65
D	**Perlogen® SF 3000**	Aqua (and) Glycol Distearate (and) Laureth-4 (and) Cocamidopropylbetaine	**1.00**
	Dye Rouge Rubis W 3004 0.1% solution	CI 14720	0.08
	Fragrance Rose 54.640.0531	Fragrance	0.50
	Nipaguard® POB	Phenoxyethanol (and) Benzoic Acid (and) Piroctone Olamine	**1.00**
E	Sodium Hydroxide 10%	Sodium Hydroxide	0.25

Procedure

I Prepare phase A by taking water into a beaker and acidifying it. Slowly add Jaguar C 162 to prevent lump formation
II Mix phase B and add to I. Make sure GlucoTain Flex is pre-molten before adding to the solution
III Prepare phase C and add to II. Wait until it viscosifies
IV Add the ingredients of phase D respectively
V Add the ingredients of phase E respectively
VI Adjust the pH to approx. 6

Viscosity (Brookfield, 20°C, 20 rpm)

- 9000 mPas

pH

- Approx. 5.80 - 6.20

Appearance

- Colored, pearlized shampoo

Stability

- 12 weeks @ RT and 40°C

Challenge Test (EP)

- Pass

PEARLIZING CREAM SHAMPOO

Ph.	Ingredient	INCI	As supplied (%)
A	Comperlan® 100	Cocamide MEA	0.75
	Cetyl Alcohol	Cetyl Alcohol	0.75
	Cutina® AGS	Glycol Distearate	1.50
B	Ucare® Polymer JR 400	Polyquaternium-10	0.15
	Hostapon® SCI 85 C	Sodium Cocoyl Isethionate	**12.00**
	Hostapon® CT paste	Sodium Methyl Cocoyl Taurate	**3.00**
	Dehyton® PK45	Cocamidopropylbetaine	8.00
	Water	Aqua	ad 100
	Disodium EDTA	Disodium EDTA	0.10
C	**GlucoTain® Flex**	Lauroyl/Myristoyl Methyl Glucamide	**3.00**
	Fragrance "Just Mild" (Cosnaderm)	Fragrance	0.30
D	**Nipaguard® SCV**	Sorbitan Caprylate (and) Phenoxyethanol (and) Benzyl Alcohol (and) Benzoic Acid	**1.00**
E	Sodium Hydroxide 20%	Sodium Hydroxide	q.s. pH 5.5 – 6.0
F	Sodium Chloride	Sodium Chloride	approx. 1.00

Procedure

I Mix the components of A and melt at approx. 70°C
II Mix the components of B at approx. 70°C
III Mix the components of C
V Mix A and B and start cooling
VI At approx. 40°C add III and D to IV. Cool down to room temperature.
VII Adjust the pH with E to 5.0
VIII Finally adjust viscosity with F

Viscosity (Brookfield, 20°C, 20 rpm)

- 13640 mPas

pH

- Approx. 5.5 - 6.0

Appearance

- Pearlized cream shampoo

Stability

- 12 weeks @ RT and 40°C

Challenge Test (EP)

- Pass

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