

Formulations 2024

Inspiration Guide

GOLD | Top 5%

ecovadis

Sustainability Rating

JAN 2024



Introduction to Sisterna® sucrose esters

Safety and mildness are key requirements in today's personal care industry and are increasingly driving formulators to focus their interest on natural and naturally derived raw materials. But just being mild and safe is not enough: today's raw materials should meet an outstanding technological performance as well.

In Sisterna® sucrose esters these requirements are combined. Being based on sucrose and vegetable fatty acids, Sisterna® sucrose esters are a unique range of high quality, non-ionic emulsifiers with exceptional performance and mildness.

Sisterna® sucrose esters can offer other unique benefits to personal care formulations, thus offering formulators many advantages in these times of environmental consciousness.

Sisterna distinguishes itself as a flexible partner that will help to find technical solutions in the development, improvement and process optimising of personal care products.

Further guide formulations are available on request.





















































Business Partners

Sisterna B.V. is responsible for the supply of Sisterna® sucrose esters in Europe and the Americas and has a network of exclusive distributors in its territory.

Visit our website www.sisterna.com to find out more about Sisterna® sucrose esters and to find the business partner responsible for your country.

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication. Nothing herein is to be construed as warranty expressed or implied. In all cases it is the responsibility of users to determine the applicability of such information or the suitability of any products for their own particular purpose.

Certifications

Grade	Natruie	Ecocert / COSMOS	Natural Certified by NPA	RSPO	Kosher	Suitable for Vegetarians	Suitable for Vegans
PS750-C		 COSMOS APPROVED		 MIXED 2-0123-09-100-00			
L70-C		 COSMOS APPROVED		 CREDITS			
SP70-C		 COSMOS APPROVED		 MIXED 2-0123-09-100-00			
SP50-C		 COSMOS APPROVED		 MIXED 2-0123-09-100-00			
SP30-C		 COSMOS APPROVED		 MIXED 2-0123-09-100-00			
SP10-C		 COSMOS APPROVED		 MIXED 2-0123-09-100-00			
SP01-C		 COSMOS APPROVED		 MIXED 2-0123-09-100-00			
A10E-C				 MIXED 2-0123-09-100-00			

Product range, functionalities & application concepts

Product range	PS750-C	L70-C	SP70-C	SP50-C	SP30-C	SP10-C	SP01-C	A10E-C
INCI-name	Sucrose Palmitate	Aqua (and) Sucrose Laurate (and) Alcohol	Sucrose Stearate	Sucrose Stearate	Sucrose Distearate	Sucrose Polystearate	Sucrose Polystearate	Sucrose Tetraostearate Triacetate
HLB value	16	15	15	11	6	2	<1	-
Physical form	powder	liquid (40%sol)	powder	powder	powder	powder	powder	powder
% mono ester	75	70	70	50	30	10	1	0

Functionalities

Emulsifier O/W	○		●	●	●			
Co-emulsifier W/O						●	●	
Co-surfactant/ mild cleanser	○	●	○					
Lipid phase modifier								●
Selective anti-microbial activity		●	●					

Application concepts

Main emulsifier			●	●	●			
Co-emulsifier O/W and W/O	○		●			●	●	
Cold emulsifier	○		●					
Gel-to-milk	○		●					
Spray/wipe & serum emulsions	○		●					
Mild cleansing	○	●	○					
Anhydrous systems						●	●	●

- First choice
- Good alternative

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Sucrose esters as main O/W emulsifier system

ME.010 Thai Wellness Body Butter
ME.015 ZnO Sun Cream SPF30
ME.016 Mild After Sun Cream
ME.017 The LLC Lotion

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Sucrose esters as co-emulsifier for O/W and W/O

CoE.008 Las Vegas Protection Cream
CoE.009 Arctic Protection Cream
CoE.010 Moisturising Foundation

3



Sucrose esters as cold emulsifier for O/W

CE.004 Cold Process Moisturising Cream
CE.005 Serum Foundation
CE.006 Light Cream-to-Oil

4



Sucrose esters for gel-to-milk (concentrated emulsion technology)

GE.013 Oil-Gel to Milk Cleanser
GE.014 Purifying Clay-to-Milk Mask
GE.015 Delicate Sandy Scrub

5



Sucrose esters for spray/wipe and serum concepts (concentrated emulsion technology)

SE.008 Conditioning Spray
SE.009 Nourishing Body Spray
SE.010 The Concentrated Serum

6



Sucrose esters for mild cleansing

MC.006 Traveller Cleansing Powder
MC.011 Bath Milk
MC.013 Micellar Cleansing Water

7



Sucrose esters in anhydrous systems

AS.004 Natural Cream-to-Powder Blush
AS.009 Lipstick Milano
AS.006 Stylish Viking Beard Wax
AS.012 Solid Face Serum
AS.013 Solid Sun Stick SPF20

Sucrose esters as main O/W emulsifier system



Sucrose esters as main O/W emulsifier system



Creating natural emulsions with a luxurious skin feel is a challenging task. This can be achieved with Sisterna® sucrose esters, which are excellent natural oil-in-water (O/W) emulsifiers. Furthermore Sisterna® sucrose esters provide an excellent touch and improve smoothness, emolliency and moisture level of the skin.

O/W emulsions

Sisterna® sucrose esters with a medium to high HLB value are recommended for the development of natural and mild O/W emulsions.

Advised products:

- Sisterna SP30-C/Sisterna SP70-C in a 2/2 ratio for creams
- Sisterna SP30-C/Sisterna SP70-C in a 3/1 ratio for lotions (LLC)
- Sisterna SP50-C

Benefits of Sisterna® sucrose esters in O/W emulsions

- Show very good emulsification properties with oils of different polarity, including vegetable and mineral oils, medium polarity and silicone oils
- Are suitable emulsifiers for the formation of traditional as well as lamellar liquid crystal type (LLC) emulsions
- Provide an excellent skin feel, largely independent of the oil phase
- Improve skin smoothness, emolliency and moisturisation
- Provide a cooling effect

With a combination of Sisterna SP30-C/SP70-C in a 2/2 ratio cosmetic mousses with a light texture and excellent skin feel can be prepared. An additional aerating step will be required in the production process. For more information, please contact Sisterna.

FORMULATION INFORMATION

ME.010 Thai Wellness Body Butter

A rich body butter which contains more than 20% of butters and other solid ingredients. Sisterna SP30-C and Sisterna SP70-C will help to remove the greasiness of these butters and solids. This also increases the spreadability and gives a lighter skin feel.

ME.010

Thai Wellness Body Butter

ID	: Main Emulsifier / ME.010
pH-value	: 5.3
Viscosity	: 83.000 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form	: O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	46.85	several
	Glycerin 99%	Glycerin	2.50	several
	Keltrol CG-SFT	Xanthan Gum	0.30	CP Kelco
	Amigum	Sclerotium Gum	0.50	Alban Muller
	Fruitliquid Pineapple PB	Glycerin, Aqua, Ananas Sativus Fruit Extract	2.00	Crodarom
2	Sistema SP70-C	Sucrose Stearate	2.00	Sistema
	Sistema SP30-C	Sucrose Distearate	2.00	Sistema
	Jasmine Butter	Prunus Amygdalus Dulcis (Sweet Almond) Oil, Hydrogenated Vegetable Oil, Jasminum Officinale (Jasmine) Oil	9.00	EFB Biotek
	Lime Butter	Citrus Aurantifolia (Lime) Seed Oil, Hydrogenated Vegetable Oil	9.00	EFB Biotek
	Coconut Oil	Cocos Nucifera (Coconut) Oil	6.00	several
	Caprylic/Capric Triglyceride	Caprylic/Capric Triglyceride	6.00	several
	Rice Serum	Oryza Sativa (Rice) Bran Oil, Phytosterols, Olea Europaea (Olive) Oil Unsaponifiables, Tocopherol	7.50	EFB Biotek
	Cetearyl Alcohol	Cetearyl Alcohol	3.00	several
	Tocomix L70-IP	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.05	Jan Dekker
	VP 67	Ricinus Communis (Castor) Seed Oil, Hydrogenated Castor Oil, Copernicia Cerifera (Carnauba) Wax	2.00	EFB Biotek
3	Euxyl K 830	Phenoxyethanol, Ethylhexylglycerin, Octenidine HCl	1.00	Ashland
	Malaysian Longan	Parfum	0.30	Luzi
4	Citric Acid (20% Aq. Sol.)	Citric Acid, Aqua	q.s.	several

Production method

1. Add the Amigel and Keltrol CG-SFT to (1) while stirring. Hydrate for 10 minutes until fully incorporated.
2. Heat (1) and (2) to 70°C.
3. Add (2) to (1) while homogenising.
4. Cool down to 40°C while continuously stirring and add (3) to (1+2) while homogenising shortly.
5. Adjust pH with (4) if necessary.

Formulation developed by Matis Specialties (Belgium) - www.matisspecialties.be

FORMULATION INFORMATION

ME.015 ZnO Sun Cream SPF30

The negative sensation of ingredients on the skin, like sun filters, is eliminated by using Sisterna SP70-C and Sisterna SP30-C as the emulsifier system. They improve spreadability, skin softness and the after feel of the total formulation in a natural way.

ME.015

ZnO Sun Cream SPF30

ID	: Main Emulsifier / ME.015
pH-value	: 7.35
Viscosity	: 203.000 mPa.s Brookfield DV2T, Spindle 94, 5 rpm
Product form	: O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	36.00	several
	Euxyl PE 9010	Phenoxyethanol, Ethylhexylglycerin	1.00	Ashland
	Glycerin	Glycerin	3.00	several
	Xilogel HS	Tamarindus Indica Seed Polysaccharide	0.25	Merck
	Actigum VSX 20	Sclerotium Gum, Xanthan Gum	0.30	Cargill
2	Sistema SP70-C	Sucrose Stearate	3.00	Sistema
	Sistema SP30-C	Sucrose Distearate	3.00	Sistema
	VS - Olive Squalane	Squalane	6.10	EPF Biotek
	Lipex PreAct	Canola Oil	3.00	AAK
	Tocomix L70-IP	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.05	Jan Dekker
	VAS - Vegetable alternative to Silicone	Hydrogenated Ethylhexyl Oliviate, Hydrogenated Olive Oil Unsaponifiables	9.00	EPF Biotek
	Caprylic Capric Triglyceride	Caprylic Capric Triglyceride	9.00	several
3	HBQP75FZS	Zinc Oxide, Butyloctyl Salicylate, Polyhydroxystearic Acid, Triethoxycaprylylsilane	16.00	KOBO Products
	HBTNP60ZSI	Zinc Oxide (Nano), Butyloctyl Salicylate, C12-15 Alkyl Benzoate, Polyhydroxystearic Acid, Triethoxycaprylylsilane	10.00	KOBO Products
4	Parfum Suncare 555828	Fragrance	0.30	Luzi

Production method

1. Premix the Actigum VSX20 and Xilogel HS into the glycerin of (1).
2. Add Euxyl PE9010 to the water of (1).
3. Disperse the premix of glycerin into (1) while homogenising during 20 minutes.
4. Heat the water phase to 75°C.
5. Weigh the ingredients of (2) and heat up to 75°C.
6. Weigh the ingredients of (3) and add to the heated oil phase (2), homogenise shortly.
7. Add (2+3) to (1) while homogenising continuously.
8. Cool down to 40°C and add (4) while stirring.
9. Cool down to room temperature while stirring.
10. Adjust pH if necessary.

FORMULATION INFORMATION
ME.016 Mild After Sun Cream

Sisterna SP30-C and Sisterna SP70-C create a light skin feel and improve skin smoothness, emolliency and moisturisation. Their mildness is key in this formulation.

ME.016

Mild After Sun Cream

ID	: Main Emulsifier / ME.016
pH-value	: 5.4
Viscosity	: 45.800 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form	: O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	51.12	several
	Glycerin	Glycerin	3.25	several
	Xilogel HS	Tamarindus Indica Seed Polysaccharide	0.25	Indena
	Actigum VSX 20	Sclerotium Gum, Xanthan Gum	0.30	Cargill
	Effsin PG	Pentylene Glycol	3.28	Ashland
	Euxyl K 712	Aqua, Sodium Benzoate, Potassium Sorbate	1.00	Ashland
2	Sistema SP70-C	Sucrose Stearate	2.00	Sistema
	Sistema SP30-C	Sucrose Distearate	2.00	Sistema
	VAB - Vanilla Butter	Prunus Amygdalus Dulcis (Sweet Almond) Oil, Helianthus Annuus (Sunflower) Seed Oil, Hydrogenated Vegetable Oil, Vanilla Planifolia Fruit Oil	9.00	EFP Biotek
	Coconut Oil	Cocos Nucifera (Coconut) Oil	6.05	several
	Apricot Oil	Prunus Armeniaca (Apricot) Kernel Oil	7.00	several
	Caprylic/Capric Triglyceride	Caprylic/Capric Triglyceride	5.00	several
	Lipex PreAct	Canola Oil	5.00	AAK
	Tocomix L70-IP	Tocopherol	0.25	Jan Dekker
Vitamin F Forte CLR	Linoleic Acid, Linolenic Acid	1.20	CLR	
3	Myramaze	Propanediol, Aqua, Myrothamnus Flabellifolia Leaf/Stem Extract, Ascorbic Acid, Citric Acid	3.00	Rahn
	Aqua Luna 357576	Fragrance	0.30	Luzi
	Citric Acid 20% solution	Citric Acid	qs	several

Production method

1. Premix the Actigum VSX 20 and Xilogel HS into the glycerin.
2. Add the preservatives and the premix to (1) while homogenising during 20 minutes.
4. Heat (1) to 72-75°C.
5. Heat (2) to 70°C.
6. Add (2) to (1) while homogenising.
7. Cool down to 40°C while stirring.
8. Add (3) and homogenise shortly until the ingredients are incorporated.
9. Cool down to room temperature while stirring.
10. Adjust pH if necessary.

FORMULATION INFORMATION

ME.017 The LLC Lotion

Combining Sisterna SP30-C and Sisterna SP70-C in a 3/1 ratio, gives you the ability to create Lamellar Liquid Crystal (LLC) emulsions. The addition of 2% cetearyl alcohol further enhances the LLC networks. The velvet skin feel created by using sucrose esters is enhanced by the LLC emulsion, also providing a higher stability and a controlled release of actives.

ME.017

The LLC Lotion

ID	: Main Emulsifier / ME.017
pH-value	: 7.10
Viscosity	: 43.200 mPa.s Brookfield DV2T, Spindle 94, 5 rpm
Product form	: O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	65.50	several
	Glycerin 99%	Glycerin	4.00	several
	Bentone Hydroclay 700	Hectorite, Xanthan Gum	1.00	Elementis
2	Sistema SP30-C	Sucrose Stearate	3.00	Sistema
	Sistema SP70-C	Sucrose Distearate	1.00	Sistema
	Cetearyl Alcohol	Cetearyl Alcohol	2.00	several
	Sweet Almond Oil	Prunus Amygdalus Dulcis (Sweet Almond) Oil	6.50	several
	Avocado Oil	Persea Gratissima (Avocado) Oil	7.00	several
	Joboba Oil	Simmondsia Chinensis (Jojoba) Seed Oil	6.50	several
	Tocomix L70-IP	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.05	Jan Dekker
3	Sensiva Go Natural	Caprylyl Glycol, Glyceryl Caprylate, Propanediol	1.15	Ashland
	Soyamine	Water, Butylene Glycol, Glycine Soja (Soybean) Germ Extract	2.00	TriBeauté
	Vibrant Herbs 261239	Parfum	0.30	Luzi
4	Citric Acid (20% Aq. Sol.)	Citric Acid, Aqua	q.s.	several

Production method

1. Disperse the Bentone Hydroclay 700 into the glycerin.
2. Add the premix to (1) with propeller mixing and stir during 20 minutes and heat to 75°C.
3. Heat (2) to 70°C.
4. Add (2) to (1) under stirring and homogenise.
5. Cool down to 40°C and add (3) to (1+2).
6. Adjust pH with (4) if necessary.
7. Cool down to room temperature while stirring.

Sucrose esters as co-emulsifier for O/W and W/O



Sucrose esters as co-emulsifier for O/W and W/O



Creating natural emulsions with a luxurious skin feel is a challenging task. Sisterna® sucrose esters are excellent natural co-emulsifiers for both oil-in-water (O/W) and water-in-oil (W/O) skin care emulsions. Furthermore Sisterna® sucrose esters provide an excellent touch and improve smoothness, emolliency and moisture level of the skin.

O/W emulsions

Sisterna® sucrose esters with a high HLB value are recommended for the development of O/W emulsions.

Advised products:

- Sisterna SP70-C as co-emulsifier with a low HLB food emulsifier, such as glycerylstearate citrate or glyceryl monostearate

Benefits of Sisterna® sucrose esters in O/W emulsions:

- Show very good emulsification properties with oils of different polarity, including vegetable and mineral oils, medium polarity and silicone oils
- Are suitable emulsifiers for the formation of traditional as well as lamellar liquid crystal type emulsions
- Provide an excellent skin feel, largely independent of the oil phase
- Improve skin smoothness, emolliency and moisturisation
- Provide a cooling effect

W/O emulsions

Sisterna® sucrose esters with a low HLB value are recommended for the development of W/O emulsions.

Advised products:

- Sisterna SP01-C or Sisterna SP10-C as co-emulsifier

Benefits of Sisterna® sucrose esters in W/O emulsions:

- Improve the spreading and after skin feel properties of the emulsion
- Eliminate the oily/greasy sensation typical of W/O emulsions

FORMULATION INFORMATION

CoE.008 Las Vegas Protection Cream

Sisterna SP70-C can be used as a natural co-emulsifier for O/W emulsions. It improves the skin feel and increases the mildness of a formulation. Dosing Sisterna SP70-C only as a co-emulsifier is also a good way of using the benefits more economically for mass market products.

CoE.008

Las Vegas Protection Cream

ID : Co-emulsifier / CoE.008
pH-value : 5.5
Viscosity : 46.800 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form : O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	70.85	several
	Dermosoft MCA Variante	Dipropylene Glycol, Caprylyl Glycol, Glyceryl Caprylate	1.00	Dr. Straetmans
2	Disodium EDTA	Disodium EDTA	0.10	several
3	Carbopol Ultrez-10	Carbomer	0.30	Lubrizol
4	CCT Oil	Caprylic/Capric Triglyceride	8.00	several
	Eusolex HMS	Homosalate	2.00	Merck
	Eusolex OCR	Octocrylene	2.00	Merck
	Eusolex 9020	Butyl Methoxydibenzoylmethane	2.00	Merck
	Amisoft HS-11P(F)	Sodium Stearoyl Glutamate	0.15	Ajinomoto
	Sisterna SP70-C	Sucrose Stearate	2.00	Sisterna
	Dermofeel GSC	Glyceryl Stearate Citrate	2.00	Dr. Straetmans
	Cetearyl Alcohol	Cetearyl Alcohol	2.00	several
	Keltrol CG-SFT	Xanthan Gum	0.30	CP Kelco
Dermofeel Toco 70	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.20	Dr. Straetmans	
5	NaOH (29% sol.)	Sodium Hydroxide, Water	0.90	several
6	RADICARE-GOLD	Crambe Abyssinica Seed Oil, Beta-Carotene, Xanthophylls, Tocopherol, Helianthus Annuus (Sunflower) Seed Oil, Rosmarinus Officinalis (Rosemary) Leaf Extract	3.00	Rahn
7	Dreams Come True	Parfum	0.20	Luzi

Production method

- Mix the ingredients of (1).
- Add (2) to (1).
- Add (3) to the surface of (1+2). Wait until the powder is fully hydrated, mix thoroughly until completely dissolved.
- Heat (1+2+3) to 70°C while stirring.
- Mix the ingredients of (4) and heat to 70°C while stirring.
- Add (4) to (1+2+3) and homogenise.
- Cool down to 40°C while stirring gently.
- Add (5, 6, 7) separately.
- Cool down to room temperature while stirring.

FORMULATION INFORMATION
CoE.009 Arctic Protection Cream

Dosing Sisterna SP01-C in this heavy duty W/O cream, improves the spreading properties, eliminates the oily or greasy sensation and enhances the after skin feel. It makes the total cream feel like a rich O/W emulsion. The addition of Sisterna A10E-C increases viscosity and improves the sensorial aspect of the final formulation.

CoE.009

Arctic Protection Cream

ID	: Co-emulsifier / CoE.009
pH-value	: Not applicable
Viscosity	: 371.200 mPa.s Brookfield DV2T, Spindle RV07, 5 rpm
Product form	: W/O

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	62.40	several
	Magnesium Sulfate 7H2O	Magnesium Sulfate Heptahydrate	0.70	several
	Glycerin 99%	Glycerin	3.00	several
	Snow Algae Powder	Coenochloris Signiensis Extract, Maltodextrin, Lecithin, Aqua	2.00	Mibelle
	Glycoin Natural	Glyceryl Glucoside, Aqua	1.00	Bitop
2	Sistema SP01-C	Sucrose Polystearate	1.50	Sistema
	Sistema A10E-C	Sucrose Tetrastearate Triacetate	3.00	Sistema
	Arlacel 1690	Sorbitan Isostearate, Polyglyceryl-3 Polyricinoleate	3.00	Croda
	Olive Squalane	Squalane	7.00	EFP Biotek
	Arnica Oil CLR	Glycine Soja (Soybean) Oil, Arnica Montana Flower Extract, Tocopherol	5.00	CLR
	Probarrier CLR	Aqua, Caprylic/Capric Triglyceride, Copernicia Cerifera (Carnauba) Wax, Decyl Glucoside, Pentylene Glycol	3.00	CLR
	Olive Squalene Wax	Olea Europaea (Olive) Oil unsaponifiables	3.00	EFP Biotek
	Dermofeel Toco 70 non GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.50	Dr. Straetmans
	Vegetable Alternative to Lanolin	Butyrospermum Parkii (Shea Butter), Glyceryl Rosinate, Olea Europaea (Olive) Oil unsaponifiables	3.50	EFP Biotek
	3	Fragile Green 260906-A	Parfum	0.30
Borealine Protect		Glycerin, Picea Mariana Bark Extract	0.10	Lucas Meyer
Euxyl K830		Phenoxyethanol, Ethylhexylglycerin, Octenidine HCl	1.00	Ashland

Production method

1. Heat (1) until 75°C.
2. Heat (2) until 75°C.
3. Add (1) to (2) while homogenising.
4. Cool down while stirring to 35°C-40°C and add (3).
5. Homogenise shortly.
6. Cool down to room temperature while stirring.

FORMULATION INFORMATION

CoE.010 W/O Moisturising Foundation

By including Sisterna SP10-C in this formulation, the spreading properties are improved, the oily or greasy sensation is eliminated and the after skin feel is enhanced. It results in a very light feeling W/O foundation.

CoE.010

Moisturising Foundation

ID	: Co-emulsifier / CoE.010
pH-value	: Not applicable
Viscosity	: 12.000- 15.000 mPa.s Brookfield RVDV 1+, Spindle 05, 20 rpm
Product form	: W/O

	Ingredient	INCI-name	% w/w	Supplier
1	Neossance Squalane	Squalane	2.50	Aprinova
	Neossance Hemisqualane	C13-15 AlkaneEmolliente	12.85	Aprinova
	Essachem EH	Octyldocecyl Oliviate	3.00	TC USA
	Sistema SP01-C	Sucrose Polystearate	1.00	Sistema
	Vitamin E	Tocopheryl Acetate	0.15	several
	SolAmaze Natural	Diisostearoyl Polyglyceryl-3 Dimer Dilinoleate, Caprylic/Capric Triglyceride	3.50	Nouryon
	Bentone Luxe XO	C13-15 Alkane, Distearidimonium Hectorite, Polyglyceryl-3 Polyricinoleate	7.00	Elementis
2	Bentone Luxe XO	C13-15 Alkane, Distearidimonium Hectorite, Polyglyceryl-3 Polyricinoleate	3.00	Elementis
	Bentone LC V	C9-12 Alkane, Distearidimonium Hectorite, Triethyl Citrate	3.00	Elementis
	Tarox Iron Oxide R-800HP	Iron Oxides C.I. 77491	0.20	Iwase Cosfa
	Tarox Iron Oxide BL-100HP	Iron Oxides C.I. 77499	0.13	Iwase Cosfa
	Tarox Iron Oxide LL-100HP	Iron Oxides C.I. 77492	0.82	Iwase Cosfa
	Hombitan AFDC101	Titanium Dioxide	10.00	Venator
3	Deionised Water	Aqua	45.85	several
	NaCl	Sodium Chloride	1.00	several
	MgsO4	Magnesium Sulfate	1.00	several
	Glycerin	Glycerin	2.00	several
	Euxyl PE 9010	Phenoxyethanol, Ethylhexylglycerin	1.00	Ashland
4	Amaze Nordic Barley	Hordeum Vulgare Seed Flour	2.00	Nouryon

Production method

1. First mix (1) and then mix (2) until homogenous.
2. Add (2) to (1) and mix until homogeneous. Heat to 70°C.
4. Mix (3), heat to 70°C and add to (+2) and homogenise for 5 minutes with a high shear mixer.
5. Cool down to 35°C while stirring and add (4). Homogenise shortly with a high shear mixer for 1 minute.

Sucrose esters as cold emulsifier for O/W



Sucrose esters as cold emulsifier for O/W



Cold process emulsifiers are becoming increasingly popular as a way of reducing costs and obtaining a greener production method. Sisterna® sucrose esters are excellent emulsifiers for cold process oil-in-water (O/W) emulsions. Furthermore Sisterna® sucrose esters provide an excellent touch and improve smoothness, emolliency and moisture level of the skin.

O/W emulsions

Sisterna® sucrose esters with a high HLB value are recommended for the development of cold process O/W emulsions.

Advised products:

- Sisterna SP70-C - Best option
- Sisterna PS750-C - Good alternative

Benefits of Sisterna® sucrose esters in cold process O/W emulsions:

- Show very good emulsification properties with oils of different polarity, including vegetable and mineral oils, medium polarity and silicone oils
- Easy to use
- Safe and mild
- Provide an excellent skin feel, largely independent of the oil phase
- Improve skin smoothness, emolliency and moisturisation
- Provide a cooling effect

FORMULATION INFORMATION

CE.004 Cold Process Moisturising Cream

Simple and effective formulation with Sisterna SP70-C, showing which maximum viscosity you can achieve with this cold production concept. Sucrose esters decrease the oily sensation of oils and therefore up to 60% can be dosed to create a cream. Adjusting the oil phase with light oils will even further improve this concept to a gentle cream. Tips and tricks to achieve the highest viscosity: take a close look at the thinning behaviour of preservatives and perfumes!

CE.004

Cold Process Moisturising Cream

ID : Cold emulsification / CE.004
pH-value : 5.22
Viscosity : 18.600 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form : O/W – Cold production

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	30.10	several
	Optiphen BSB-W	Benzyl Alcohol, Aqua, Sodium Benzoate, Potassium Sorbate	1.00	Ashland
	Glycerin	Glycerin	5.00	several
	Clearogel SG	Sclerotium Gum	0.30	MMP
	Keltrol CG-SFT	Xanthan Gum	0.30	CP Kelco
2	CCT Oil	Caprylic Capric Triglycerides	60.00	several
	Sisterna SP70-C	Sucrose Stearate	3.00	Sisterna
	Cocooning 239283	Parfum	0.30	Luzi

Production method

1. Disperse the Sclerotium Gum and Xanthan Gum into the glycerin while stirring.
2. Add the dispersion (1) into the water with preservative while stirring with a high shear mixer for 10 minutes.
3. Mix (2) in given order while stirring to homogeneous solution.
4. Add (2) into (1) while homogenising.
5. Adjust pH if necessary.

CE.005

Serum Foundation

ID	: Cold emulsification / CE.005
pH-value	: 5.8
Viscosity	: 5.320 mPa.s Brookfield DV2T, Spindle 91, 5 rpm
Product form	: O/W – Cold production

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin	Glycerin	3.00	several
	Xilogel HS	Tamarindus Indica Seed Polysaccharide	0.25	Indena
	Actigum VSX 20	Sclerotium Gum, Xanthan Gum	0.30	Cargill
2	Deionised Water	Aqua	59.55	several
	CutiGuard CLR™	Betaine, Sucrose, Hydrolyzed Rhodophyceae Extract, Aqua	3.00	CLR
	Disodium EDTA	Disodium EDTA	0.20	several
	Euxyl K 712	Aqua, Sodium Benzoate, Potassium Sorbate	1.00	Ashland
	Effsin PG	Pentylene Glycol	3.28	Ashland
3	Colorona Oriental Beige	Mica, Titanium Dioxide, Iron Oxide	1.00	Merck
4	Sistema SP70-C	Sucrose Stearate	4.00	Sistema
	Sistema PS750-C	Sucrose Palmitate	1.00	Sistema
	Apricot Kernel Oil	Prunus Armeniaca (Apricot) Kernel Oil	6.00	several
	Dermofeel Toco 70 non GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.20	Evonik
	EV - Olive Squalene	Squalene	2.50	EFP Biotek
	Lipex PreAct	Canola Oil	2.50	AAK
	VS - Olive Squalane	Squalane	5.00	EFP Biotek
	VAS Light - Veg. Alt. to Highly Volatile Silicone	Undecane, Tridecane, Hydrogenated Olive Oil Unsaponifiables, Coco-Caprylate/Caprates	4.00	EFP Biotek
5	Unipure White LC981	CI 77891	2.50	Sensient
	Unipure Yellow LC182	CI 77492	0.30	Sensient
	Unipure Red LC381	CI 77491	0.10	Sensient
	Unipure Black LC989	CI 77499	0.02	Sensient
	Smooth Wildrose 500354-A	Fragrance	0.30	Luzi

Production method

- Premix the Actigum VSX 20 and Xilogel HS into the glycerin (1).
- Disperse the premix (1) in the aqueous phase (2) while homogenising for 20 minutes.
- Add the pigment (3) to phase (1+2) and homogenise.
- Mix the oil phase (4) in given order and homogenise.
- Add phase (5) separately to (4) while stirring, until the pigments are fully dispersed and the phase is homogenous.
- Add phase (4+5) into phase (1+2+3) while homogenising.
- Adjust the pH if necessary.

CE.006

Light Cream-to-Oil

ID : Cold emulsification / CE.006
pH-value : 5.41
Viscosity : 16.200 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form : O/W – Cold production

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	30.10	several
	Optiphen BSB-W	Benzyl Alcohol, Aqua, Sodium Benzoate, Potassium Sorbate	1.00	Ashland
	Glycerin	Glycerin	5.00	several
	Clearogel SG	Sclerotium Gum	0.30	MMP
	Keltrol CG-SFT	Xanthan Gum	0.30	CP Kelco
2	VASLight	Undecane, Tridecane, Hydrogenated Olive Oil Unsaponifiables, Coco-Caprylate/Caprate	20.00	EFB Biotek
	Lipex SheaSolve	Shea Butter Ethyl Esters	20.00	AAK
	GSOLight	Vitis Vinifera (Grape) Seed Oil	19.80	EFB Biotek
	Sisterna SP70-C*	Sucrose Stearate	3.00	Sisterna
	Dermofeel Toco 70 Non-Gmo	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.20	Dr. Straetmans
Argan Infusion (240046)	Parfum	0.30	Luzi	
3	Citric Acid (10% Aq. Sol.)	Citric Acid	q.s.	several

* Alternative grade: [Sisterna PS750-C](#) (INCI: [Sucrose Palmitate](#)). Viscosity: 17.200 mPa.s

Production method

1. Disperse the Clearogel SG and Xanthan Gum into the glycerin while stirring.
2. Add the dispersion (1) into the water with preservative while stirring with a high shear mixer for 10 minutes.
3. Mix (2) in given order and homogenise until Sisterna SP70-C is well dispersed into the oil.
4. Add (2) into (1) while homogenising.
5. Adjust pH with (3) if necessary.

Sucrose esters for
gel-to-milk
(concentrated emulsion technology)



Sucrose esters for gel-to-milk concepts (concentrated emulsion technology)



Concentrated emulsion technology for gel-to-milk concepts Sisterna® sucrose esters with a high HLB value are recommended for the development of oil-in-glycerin (O/G) concentrated emulsions, with the aspect of an oil gel turning into milk when diluted with water upon use.

Advised products:

- Sisterna SP70-C - Best option
- Sisterna PS750-C - Good alternative

Additional concept information:

- The optimum ratio of oil/glycerin is between 30/70 and 60/40
- To decrease the viscosity, the oil phase can be reduced to 30% as a maximum
- Combine Sisterna SP70-C or Sisterna PS750-C with Sisterna L70-C as an alternative to decrease viscosity
- Standard homogenisation equipment is used
- Transparent emulsions can be obtained by matching refractive indices of oil and glycerin phase
- Best emulsion stability is obtained with vegetable oils, caprylic/capric triglyceride

FORMULATION INFORMATION

GE.013 Oil-Gel to Milk Cleanser

A high viscous facial cleanser, still suitable for an airless dispenser, that turns into a milk on the skin when in contact with water. A good product to remove make up which leaves a velvet-like after feel on the skin.

GE.013

Oil-Gel to Milk Cleanser

ID : Gel-to-milk / GE.013
pH-value : Not Applicable
Viscosity : 151.800 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form : Gel-to-milk

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin 99% Sisterna SP70-C	Glycerin Sucrose Stearate	37.70 2.00	several Sisterna
2	Sunflower Oil Tocopherol Oil CLR	Helianthus Annuus (Sunflower) Seed Oil Glycine Soja (Soybean) Oil, Tocopherol	59.00 1.00	several CLR
3	Natural Care 342791-A	Parfum	0.30	Luzi

Production method

1. Mix (1) and heat to 70-75°C.
2. Mix (2) and heat to 70-75°C.
3. Add (2) to (1) very slowly while homogenising.
4. Cool down to 40°C and add (3). Homogenise shortly.
5. Cool down to room temperature while stirring.

Formulation prepared via concentrated emulsification procedure.

FORMULATION INFORMATION

GE.014 Purifying Clay-to-Milk Mask

A mask containing 20% of green clay which is easily rinsed off afterwards. The clay mask forms a milk when in contact with water, creating a nice surprise effect. Afterwards a silky soft skin feel will be experienced.

GE.014

Purifying Clay-to-Milk Mask

ID : Gel-to-milk / GE.014
pH-value : N/A
Viscosity : 651.000 mPa.s Brookfield DV2T, Spindle 95, 5 rpm
Product form : Gel-to-milk

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin 99% Sisterna SP70-C	Glycerin Sucrose Stearate	38.00 2.00	several Sisterna
2	VS - Olive Squalane Apricot Oil VAL - Vegetable Alternative to Lanolin Jojoba Oil Tocomix L70-IP	Squalane Prunus Armeniaca (Apricot) Kernel Oil Butyrospermum Parkii (Shea) Butter, Glyceryl Rosinate, Olea Europaea (Olive) Oil Unsaponifiables Simmondsia Chinensis (Jojoba) Seed Oil Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	5.00 12.50 9.00 12.40 0.10	EFB Biotek several EFB Biotek several Jan Dekker
3	Vibrant Energy 261236-A Green Clay ER	Parfum Illite	1.00 20.00	Luzi Alban Muller

Production method

1. Disperse Sisterna SP70-C into the glycerin (1) and heat up to 70°C.
2. Mix the ingredients of the oil phase (2) in given order and heat up to 75°C.
3. Add (2) to (1) slowly while homogenising.
4. Cool down to 35 °C and add the ingredients of (3) to (1+2) while stirring.

Formulation prepared via concentrated emulsification procedure.

FORMULATION INFORMATION

GE.015 Delicate Sandy Scrub

Gel-to-milk formulations with a high viscosity are a perfect basis for an exfoliant scrub. In this case a fine and sand-like scrub particle has been dosed giving a gentle scrub sensation. The combination of the subtle scrub experience and the typical skin feel of a gel-to-milk formulation creates a silky soft after feel.

GE.015

Delicate Sandy Scrub

ID : Gel-to-milk / GE.015
pH-value : N/A
Viscosity : 244.400 mPa.s Brookfield DV2T, Spindle 94, 5 rpm
Product form : Gel-to-milk

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin Sisterna SP70-C	Glycerin Sucrose Stearate	30.00 2.00	several Sisterna
2	VS - Olive Squalane Lipex Preact GSOLight VAS - Vegetable Alternative to Silicone Organic Jojoba Oil Refined	Squalane Canola Oil Vitis Vinifera (Grape) Seed Oil Hydrogenated Ethylhexyl Olivatate, Hydrogenated Olive Oil Unsaponifiables Simmondsia Chinensis (Jojoba) Seed Oil	5.00 12.00 20.00 12.00 12.00	EFB Biotek AAK EFB Biotek EFB Biotek several
3	Matcha Infusion 354261-A Phytpeel Green Rhyolite 300	Parfum Pumice, Shellac, CI 77288	1.00 6.00	Luzi GreenPhyt

Production method

1. Disperse Sisterna SP70-C into the glycerin (1) and heat up to 70°C.
2. Mix the ingredients of the oil phase (2) in given order and heat up to 75°C.
3. Add (2) to (1) slowly while homogenising.
4. Cool down to 35 °C and add the ingredients of (3) to (1+2) while stirring.

Formulation prepared via concentrated emulsification procedure.

Sucrose esters for
spray/wipe and serum concepts
(concentrated emulsion technology)



Sucrose esters for spray/wipe and serum concepts (concentrated emulsion technology)



Concentrated emulsion technology for spray and wipe concepts

Thin liquid oil-in-water emulsions with very small droplet sizes of 0.3 micrometer can be obtained when producing via a simple intermediate concentrated oil-in-glycerin (O/G) emulsification step. The O/G emulsion is then diluted with water to a final spray or wipe formulation.

Advised products:

- Sisterna SP70-C - Best option
- Sisterna PS750-C - Good alternative

Additional concept information:

- The optimum ratio of oil/glycerin is 50/50
- Standard homogenisation equipment is used
- After emulsification the emulsion is diluted with water containing a stabiliser

Serum formulations

Due to the very small droplet sizes of 0.3 micrometer, this is also an excellent production method for making serums with a high skin penetration. The serums can require a higher viscosity than the spray and wipe concepts.

Additional concept information:

- Equal production method compared to making spray/wipe emulsions
- Increasing the intermediate oil-in-glycerine phase and reducing the water phase increases the viscosity needed for a serum
- By selecting the right hydrocolloids, viscosity can be increased further

FORMULATION INFORMATION

SE.008 Conditioning Spray

With an oil-in-glycerin intermediate phase, sprayable formulations can be made without using ethoxylated emulsifiers. Stable emulsions with oil droplets of 0.3 micrometer are made with an oil concentration as low as 5%.

SE.008

Conditioning Spray

ID : Spray & Wipe / SE.008
pH-value : 5.46
Viscosity : 2.200 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form : O/W Spray

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin 99% Sisterna SP70-C	Glycerin Sucrose Stearate	5.00 1.50	several Sisterna
2	VAVSLight Relaxed Music 354053-C Tocomix L70-IP	Dodecane, Hydrogenated Olive Oil Unsaponifiables, Coco-Caprylate/Caprate Parfum Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	5.00 0.30 0.10	EPF Biotek Luzi Jan Dekker
4	Deionised Water Avicel PC611 Wasabi Flavone	Aqua Microcrystalline Cellulose, Cellulose Gum Butylene Glycol, Wasabia Japonica Leaf Extract	85.10 1.50 0.50	several FMC Biopolymer TriBeauté
5	Euxyl K 712 Citric Acid (10% Aq. Sol.)	Sodium Benzoate, Potassium Sorbate, Aqua Citric Acid	1.00 q.s.	Ashland several

Production method

1. Disperse Sisterna SP70-C into the glycerine (1).
2. Mix ingredients of (2) in given order.
3. Add (2) to (1) and homogenise with a high shear mixer for 1 minute.
4. Add Avicel PC611 to the water of (3) and shear for 10 minutes with a high shear mixer.
5. Add oil-in-glycerin emulsion (1+2) to (3) while mixing.
6. Add (4) and adjust pH 6,5 with Citric Acid if necessary.

Formulation prepared via concentrated emulsification procedure.

FORMULATION INFORMATION

SE.009 Nourishing Body Spray

Sprayable formulations with an oil phase of 12% can be obtained by producing with an oil-in-glycerin intermediate phase. No ethoxylated emulsifiers need to be used and oil droplets of 0.3 micrometer are created. Having a higher oil phase will mean that the lotion will be a little more viscous, but depending on the spray packaging it can be a perfectly sprayable formulation.

SE.009

Nourishing Body Spray

ID : Spray & Wipe / SE.009
pH-value : 5.41
Viscosity : 3.000 mPa.s Brookfield DV2T, Spindle 91, 5 rpm
Product form : O/W Spray

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin 99% Sisterna SP70-C	Glycerin Sucrose Stearate	8.00 2.00	several Sisterna
2	Olive Oil	Olea Europaea (Olive) Fruit Oil	4.00	several
	Almond Oil	Prunus Amygdalus Dulcis (Sweet Almond) Oil	4.00	several
	Jjoba Oil	Simmondsia Chinensis (Jjoba) Oil	4.00	several
	Dermofeel Toco 70 Non-GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.20	Dr. Straetmans
	CAMOMILE 338572-A	Parfum	0.30	Luzi
3	Deionised Water	Aqua	75.00	several
	Avicel PC611	Microcrystalline Cellulose, Cellulose Gum	1.50	FMC Biopolymer
4	Euxyl PE9010	Phenoxyethanol, Ethylhexylglycerin	1.00	Ashland
	Citric Acid (10% Aq. Sol.)	Citric Acid	q.s.	several

Production method

1. Disperse Sisterna SP70-C into glycerin (1).
2. Mix ingredients of (2) separately.
3. Add (2) to (1) and homogenise with a high shear mixer for 1 minute.
4. Add Avicel PC611 to the water of (3) and shear for 10 minutes with a high shear mixer.
5. Add oil-in-glycerin emulsion (1+2) to (3) while mixing.
6. Add (4) and adjust pH 6.5 with Citric Acid if necessary.

Formulation prepared via concentrated emulsification procedure.

FORMULATION INFORMATION

SE.010 The Concentrated Serum

Making an emulsion with an oil-in-glycerin intermediate emulsification step enables the formation of droplet sizes of 0.3 micrometer. This production method is excellent for dosing oil actives which will be boosted as a result of this better skin penetration, creating extremely effective serums.

SE.010

The Concentrated Serum

ID	: Serum / SE.010
pH-value	: 6.60
Viscosity	: 6.600 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form	: O/W Serum

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin 99% Sisterna SP70-C	Glycerin Sucrose Stearate	8.00 2.00	several Sisterna
2	MOT - Maxi Olive 3T-Action	Olea Europaea (Olive) Oil Unsaponifiables, Tocopherol	3.00	EPF Biotek
	Active Lipo Extract Maqui	Helianthus Annuus (Sunflower) Seed Oil, Aristotelia Chilensis Fruit Extract, Tocopherol	3.00	Phenbiox
	Active Lipo Extract Olivo Foglie	Helianthus Annuus (Sunflower) Seed Oil, Olea Europaea Leaf Extract, Tocopherol	3.00	Phenbiox
	Active Lipo Extract The Verde	Helianthus Annuus (Sunflower) Seed Oil, Camellia Sinensis Leaf Extract, Tocopherol	3.00	Phenbiox
	Tocomix L70-IP	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.10	Jan Dekker
3	Deionised Water	Aqua	75.90	several
	Bentone Hydroclay 700	Hectorite, Xanthan Gum	1.00	Elementis
	Euxyl PE9010	Phenoxyethanol, Ethylhexylglycerin	1.00	Ashland
4	Citric Acid (10% Aq. Sol.)	Citric Acid, Aqua	q.s.	several

Production method

1. Disperse Sisterna SP70-C into the glycerin (1) and heat until 70°C.
2. Heat (2) separately to 70°C.
3. Add (2) to (1) and homogenise with a high shear mixer for 1 minute.
4. Slowly add the Bentone Hydroclay 700 to the water under medium shear.
Then mix at the highest possible shear for 10 minutes.
5. Add oil in glycerin emulsion (1+2) to (3) while mixing.
6. Adjust pH if necessary with (4).

Cold process production method is optional.

Formulation prepared via concentrated emulsification procedure.

Sucrose esters for mild cleansing



Sucrose esters for mild cleansing



Water based systems

In the development of body and hair cleansing formulations non-ionic surfactants are added to blends of traditional foaming anionic and amphoteric surfactants to improve mildness. Sisterna® sucrose esters are non-ionic and EO-free surfactants and their interesting and innovative properties make them excellent candidates for this type of products.

Advised products:

- Sisterna L70-C
- Alternatively Sisterna PS750-C or Sisterna SP70-C for non-transparent systems

Benefits of Sisterna® sucrose esters in mild cleansing:

- Reduce the irritating properties of anionic surfactants
- Considerably improve the sensorial properties of the formulations, in terms of skin feel and skin mildness
- Emulsify lipids into the cleansing formulation
- Contribute to the conditioning effect in shampoo and conditioners
- Increase viscosity at lower electrolyte concentrations

MC.006

Traveller Cleansing Powder

ID : Mild cleansing / MC.006
pH-value : N/A
Viscosity : N/A
Product form : Powder

	Ingredient	INCI-name	% w/w	Supplier
1	FARMAL CS 3757	Zea Mays (Corn) Starch	23.50	Ingredion
	Tea White 338675	Parfum	1.00	Luzi
2	Talc	Talc	25.00	Kobo
	Amisoft LS-11	Sodium Lauroyl Glutamate	15.00	Ajinomoto
	Amisoft MS-11	Sodium Myristoyl Glutamate	15.00	Ajinomoto
	Mannitol	Mannitol	12.00	several
	Sisterna SP70-C	Sucrose Stearate	4.00	Sisterna
	Zymo Clear MD	Maltodextrin, Protease, Lipase	3.00	I.R.A.
	Amihope LL	Lauroyl Lysine	1.00	Ajinomoto
Ketrol CG-SFT	Xanthan Gum	0.50	CP Kelco	

Production method

1. Mix (1) by adding the perfume slowly to the Zea Mays Starch while mixing until homogeneous.
2. Add ingredients of phase (2) in given order until homogeneous.
3. Sieve the powder.

FORMULATION INFORMATION

MC.011 Bath Milk

A perfect formulation for making a silky soft milk bath which leaves your skin soft and cleansed.

MC.011

Bath Milk

ID : Mild cleansing / MC.011
pH-value : 6.5
Viscosity : 2.880 mPa.s Brookfield DV2T, Spindle 91, 5 rpm
Product form : O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin (99%) Sisterna SP70-C	Glycerin Sucrose Stearate	5.00 1.50	several Sisterna
2	Olive Oil Almond Oil Jojoba Oil Dermofeel Toco 70 Non-GMO CAMOMILE 338572-A	Olea Europaea (Olive) Fruit Oil Prunus Amygdalus Dulcis (Sweet Almond) Oil Simmondsia Chinensis (Jojoba) Oil Tocopherol, Helianthus Annuus (Sunflower) Seed Oil Parfum	2.00 2.00 1.00 0.25 0.30	several several several Dr. Straetmans Luzi
3	Deionised Water Avicel PC611	Aqua Microcrystalline Cellulose, Cellulose Gum	85.45 1.50	several FMC Biopolymer
4	Euxyl PE9010 Citric Acid (10% Aq. Sol.)	Phenoxyethanol, Ethylhexylglycerin Citric Acid, Aqua	1.00 qs	Ashland several

Production method

1. Disperse Sisterna SP70-C into the glycerin (1).
2. Mix ingredients of (2) separately.
3. Add (2) to (1) and homogenise with a high shear mixer for 1 minute.
4. Add Avicel PC611 to the water of (3) and shear for 10 minutes with a high shear mixer.
5. Add oil-in-glycerin emulsion (1+2) to (3) while mixing.
6. Add (4) and adjust pH 6,5 with Citric Acid if necessary.

Formulation prepared via concentrated emulsification procedure.

FORMULATION INFORMATION

MC.013 Micellar Cleansing Water

Sisterna L70-C is very mild for the skin and it also reduces the irritation level of other surfactants.
Combining it with cocamidopropyl betaine gives good cleansing properties while ensuring skin mildness.

MC.013

Micellar Cleansing Water

ID : Mild cleansing / MC.013
pH-value : 6.40
Viscosity : 40 mPa.s Brookfield DV2T, Spindle 91, 5 rpm
Product form : EO-free rinse-off

	Ingredient	INCI-name	% w/w	Supplier
1	Sisterna L70-C Euroquat HC47VG Zemea Propanediol S&M Phenoxyethanol RHC Deionised Water	Aqua, Sucrose Laurate, Alcohol Cocamidopropyl Betaine Propanediol Phenoxyethanol Aqua	4.50 1.00 5.00 0.90 88.60	Sisterna EOC Surfactants several Ashland several
2	NaOH (10% solution)	Sodium Hydroxide, Aqua	q.s.	several

Production method

1. Mix ingredients of (1) in given order.
2. Adjust pH with (2) if necessary.

Sucrose esters in anhydrous systems



Sucrose esters in anhydrous systems



Sisterna A10E-C is a special sucrose ester grade, obtained by the esterification of sucrose with stearic, palmitic fatty acids and acetic acid. Due to its high degree of esterification, Sisterna A10E-C no longer has surface active properties, resulting in a completely different behaviour compared to all other Sisterna grades. Sisterna A10E-C can be considered as a so called 'sugar wax', which can be used as lipidic phase modifier to influence the rheological and sensorial properties of oils and natural butters.

Advised products:

- Sisterna A10E-C as lipidic phase modifier

Benefits of Sisterna A10E-C in anhydrous systems:

- Thickens or gels many oils as well as silicone oils
- Helps reducing blooming and sweating of sticks when oils that are easily thickened by Sisterna A10E-C are dosed inside the formulation
- Improves the sensorial properties
- Improves cohesion of sticks
- Reduces brittleness of sticks
- Excellent binding properties in compact powders

FORMULATION INFORMATION

AS.004 Natural Cream-to-Powder Blush

Sisterna A10E-C makes the balm stronger but also more bendable, making it less easy to break. The amount of waxes with a high melting point can be reduced and sensorial properties are improved. It also improves the spreadability, because Sisterna A10E-C enables the formula to melt near skin temperature. Furthermore it helps reducing blooming and sweating of sticks.

AS.004

Natural Cream-to-Powder Blush

ID : Anhydrous / AS.004
pH-value : Not applicable
Viscosity : Wax
Product form : Anhydrous stick

	Ingredient	INCI-name	% w/w	Supplier
1	Biophytosebum Organic	Decyl Olive Oil Esters (and) Squalene	31.50	Sophim
	Cetiol Ultimate	Undecane (and) Tridecane	9.00	BASF
	Dermofeel Sensolv	Isoamyl Laurate	12.50	Dr. Straetmans
	Silica Microbead P 1500	Silica	5.00	Kowa
	Candelilla Wax	Euphorbia Cerifera (Candelilla) Wax	10.00	several
	Sisterna A10E-C	Sucrose Tetraesterate Triacetate	10.00	Sisterna
2	Hombitan AFDC	Titanium Dioxide	11.40	Huntsman
	Ferroxide 212P Red	CI 77491	1.00	Huntsman
	Unipure Pink LC583	CI 77742	3.80	Sensient
	Unipure Pink LC589	CI 77007	3.80	Sensient
3	COVIOX T-90 EU C	Tocopherol	1.00	BASF
	Perfume Doucer Miel Natflor (RS38177)	Parfum	1.00	several

Production method

1. Weigh (1) in beaker and put in water bath to melt to 85°C.
2. Add (2) into (1) and homogenise.
3. Then add (3) and stir for 1 minute.
4. Pour the mixture into the packaging.
5. Allow to cool down to room temperature.

FORMULATION INFORMATION

AS.009 Lipstick Milano

Sistema A10E-C makes the lipstick stronger but also more bendable, making it less easy to break. The amount of waxes with a high melting point can be reduced and sensorial properties are improved. It also improves the spreadability, because Sistema A10E-C enables the formula to melt near skin temperature. Furthermore it helps reducing blooming and sweating of sticks. Sistema SP10-C provides more gloss and creaminess.

AS.009

Lipstick Milano

ID : Anhydrous / AS.009
pH-value : -
Viscosity : -
Product form : Anhydrous stick

	Ingredient	INCI-name	% w/w	Supplier
1	Sisterna A10E-C	Sucrose Tetrastearate Triacetate	10.00	Sisterna
	Sisterna SP10-C	Sucrose Polystearate	1.00	Sisterna
	Candelilla Wax	Euphorbia Cerifera (Candelilla) Wax	4.50	Koster Keunen
	Carnauba Wax T1	Copernicia Cerifera (Carnauba) Wax	2.00	Koster Keunen
	Permulgin 3280	Ozokerite	4.50	Koster Keunen
	Kesterwax K82 P	Synthetic Beeswax	3.00	Koster Keunen
	Sunflower Wax	Helianthus Annuus (Sunflower) Seed Wax	4.20	Koster Keunen
	CCT Oil	Caprylic/Capric Triglyceride	24,41	several
	Isostearyl Isostearate	Isostearyl Isostearate	25.00	several
	TeCero-Wachs®30332cs	Hydrogenated Microcrystalline Wax, Synthetic Wax	6.29	TH.C.TROMM
2	Dermofeel Toco 70	Tocopherol	0.10	Dr. Straetmans
	COD 8001	Castor (Ricinus Communis) Oil, CI 15850	2.45	Sun Chemical
	COD 8003	Castor (Ricinus Communis) Oil, CI 15850	0.55	Sun Chemical
	COD 8009	Castor (Ricinus Communis) Oil, CI 19140	3.40	Sun Chemical
	COD 8008	Castor (Ricinus Communis) Oil, CI 177891	7.60	Sun Chemical
3	Berry Lips 500326	Parfum	1.00	Luzi

Production method

1. Before starting: spray silicone release spray in mould and put in oven at 45°C.
2. Weigh (1) in beaker and put in water bath to melt to 85°C.
3. Add (2) into (1) and homogenise.
4. Then add (3) and stir for 1 minute.
5. Take mould out of the oven and pour the mixture into the mould.
6. Allow to cool down for 20 minutes at room temperature.
7. Take the top part of the mixture out of the mould with the scraping spatula.
8. Put the mould in the freezer for 20 minutes.
9. Put the lipsticks in the cases.

FORMULATION INFORMATION

AS.006 Stylish Viking Beard Wax

A good spreadable wax because of the addition of Sisterna A10E-C which lets the formula melt near skin temperature. It also softens the hair while styling it and is very caring for the scalp.

AS.006

Stylish Viking Beard Wax

ID : Anhydrous / AS.006
pH-value : Not applicable
Viscosity : Wax/Paste
Product form : Anhydrous balm

	Ingredient	INCI-name	% w/w	Supplier
1	Cupuacu Butter Refined	Theobroma Grandiflorum Seed Butter	14.00	Jan Dekker
	Castor Oil Refined	Ricinus Communis (Castor) Seed Oil	45.70	Jan Dekker
	Sisterna A10E-C	Sucrose Tetrastearate Triacetate	5.00	Sisterna
	Kahlwax 8104	Cera Alba	8.00	Kahlwax
	Kahlwax 6720	Shorea Robusta Resin, Helianthus Annuus (Sunflower) Seed Oil, Tocopherol	15.00	Kahlwax
	Octyldodecanol	Octyldodecanol	5.00	BASF
2	Dermofeel Toco 70 non-GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.50	Dr. Straetmans
	St. Johns Worth Oil	Olea Europaea (Olive) Fruit Oil, Hypericum Perforatum Flower/Leaf/Stem Extract, Tocopherol	5.00	CLR
3	Eldew PS-203 R	Phytosteryl/Octyldodecyl Lauroyl Glutamate	0.30	Ajinomoto
	Vanacco (351830-F)	Parfum	1.50	Luzi

Production method

1. Prepare (1), heat to 80 °C.
2. Add (2) and (3) while stirring.
3. Fill the homogenous oil compound into the final packaging.
4. Cool down to room temperature.

FORMULATION INFORMATION

AS.012 Solid Face Serum

Silky soft waterless serum with a good pay-off and oil absorption, providing a well-liked and dry skin feel. A perfect system for dosing oil actives and creating a long lasting anhydrous serum.

AS.012

Solid Face Serum

ID : Anhydrous / AS.012
pH-value : N/A
Viscosity : N/A
Product form : Anhydrous stick

	Ingredient	INCI-name	% w/w	Supplier
1	Jasmin Butter	Prunus Amygdalus Dulcis (Sweet Almond) Oil, Hydrogenated Vegetable Oil, Jasminum Officinale (Jasmine) Oil	27.00	EFP Biotek
	Candelilla Wax	Euphorbia Cerifera (Candelilla) Wax	2.50	Koster Keunen
	Vegetable Alternative to Beeswax #2	Hydrogenated Sunflower Seed Oil	7.40	EFP Biotek
	Caprylic Capric Triglyceride	Caprylic Capric Triglyceride	35.00	several
	VAS - Vegetable Alternative to Silicone	Hydrogenated Ethylhexyl Olivat Hydrogenated Olive Oil Unsaponifiables	15.00	EFP Biotek
	Sisterna A10E-C	Sucrose Tetraacetate Triacetate	10.00	Sisterna
	Dermofeel Toco 70 Non-GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.10	Dr. Straetmans
	Cutibiome CLR	Octyldodecanol, Leptospermum Scoparium Branch/Leaf Oil, Piper Nigrum (Pepper) Seed Extract, Magnolia Officinalis Bark Extract	3.00	CLR

Production method

1. Mix the ingredients at 80°C in the listed order.
2. Heat until completely transparent and homogeneous.
3. Pour directly into a suitable packaging while molten.
4. Cool down slowly to room temperature. Final viscosity will be built up after 48h.

FORMULATION INFORMATION

AS.013 Solid Sun Stick SPF20

Soft touch suncare balm with an easy pay-off and good oil absorption which provides a non-greasy and dry skin feel, due to Sisterna A10E-C.

AS.013

Solid Sun Stick SPF20

ID : Anhydrous / AS.013
pH-value : N/A
Viscosity : N/A
Product form : Anhydrous stick

	Ingredient	INCI-name	% w/w	Supplier
1	Candelilla Wax	Euphorbia Cerifera (Candelilla) Wax	3.50	Koster Keunen
	HSFO - Vegetable	Hydrogenated Sunflower Seed Oil	8.00	EFP Biotek
	Alternative to Beeswax 2			
	VAB - Vanilla Butter	Prunus Amygdalus Dulcis (Sweet Almond) Oil, Helianthus Annuus (Sunflower) Seed Oil, Hydrogenated Vegetable Oil, Vanilla Planifolia Fruit Oil	26.00	EFP Biotek
	Caprylic Capric Triglyceride	Caprylic Capric Triglyceride	20.40	several
	VAS - Vegetable Alternative to Silicone	Hydrogenated Ethylhexyl Oliviate, Hydrogenated Olive Oil Unsaponifiables	15.00	EFP Biotek
	Sisterna A10E-C	Sucrose Tetraesterate Triacetate	10.00	Sisterna
	Eusolex T-AVO	Titanium Dioxide, Silica	8.00	Merck
	Ronacare Zinc Oxide	Zinc Oxide	4.00	Merck
	RonaFlair Flawless	Silica, Titanium Dioxide (CI 77891), Iron Oxides (CI 77491)	5.00	Merck
	Dermofeel Toco 70 Non-GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.10	Dr. Straetmans

Production method

1. Mix the ingredients at 75°C in the listed order.
2. Heat until completely transparent and homogeneous.
3. Pour directly into suitable packaging while molten.
4. Cool down slowly to room temperature. Final viscosity will be built up after 48h.

