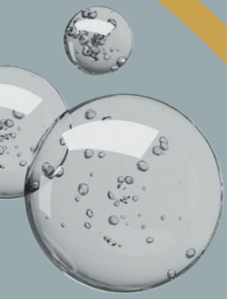




SISTERNA®

Formulation Guide 2026





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	HALAL	Natural Certified by NPA	RSPO	Kosher	Suitable for Vegetarians	Suitable for Vegans
PS750-C		 COSMOS APPROVED	 NPO JAPAN HALAL ASSOCIATION JHAS1002-2019		 MIXED 2-0123-09-100-00			
L70-C		 COSMOS APPROVED			 CREDITS			
SP70-C		 COSMOS APPROVED	 NPO JAPAN HALAL ASSOCIATION JHAS1002-2019		 MIXED 2-0123-09-100-00			
SP50-C		 COSMOS APPROVED	 NPO JAPAN HALAL ASSOCIATION JHAS1002-2019		 MIXED 2-0123-09-100-00			
SP30-C		 COSMOS APPROVED	 NPO JAPAN HALAL ASSOCIATION JHAS1002-2019		 MIXED 2-0123-09-100-00			
SP10-C		 COSMOS APPROVED	 NPO JAPAN HALAL ASSOCIATION JHAS1002-2019		 MIXED 2-0123-09-100-00			
SP01-C		 COSMOS APPROVED	 NPO JAPAN HALAL ASSOCIATION JHAS1002-2019		 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 (38% 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

1		Sucrose esters as main O/W emulsifier system	ME.019 Light & Soft Body Butter	11
			ME.016 Mild After Sun Cream	13
			ME.017 The LLC Lotion	15
			ME.018 Sun Lotion SPF30	17


2		Sucrose esters as co-emulsifier for O/W and W/O	CoE.012 Caring Foot Cream	23
			CoE.009 Arctic Protection Cream	25
			CoE.011 Natural Baby Lotion	27

3		Sucrose esters as cold emulsifier for O/W	CE.007 High Viscous Light Cream	33
			CE.006 Light Cream-to-Oil	35
			CE.008 Simple & Effective Lotion	37

4		Sucrose esters for gel-to-milk (concentrated emulsion technology)	GE.006 Good Night Facial Cleanser	43
			GE.014 Purifying Clay-to-Milk Mask	45
			GE.015 Delicate Sandy Scrub	47

5		Sucrose esters for spray/wipe and serum concepts (concentrated emulsion technology)	SE.008 Conditioning Spray	53
			SE.009 Nourishing Body Spray	55
			SE.011 Gel-Lotion Eye Serum	57
			SE.012 Well-Ageing Serum	59

6		Sucrose esters for mild cleansing	MC.013 Micellar Cleansing Water	65
			MC.011 Bath Milk	67

7		Sucrose esters in anhydrous systems	AS.014 Dry Skin Paste	73
			AS.013 Solid Sun Stick SPF20	75
			AS.012 Solid Face Serum	77
			AS.009 Lipstick Milano	79
			AS.004 Natural Cream-to-Powder Blush	81

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.

ME.019

Light & Soft Body Butter

ID	: Main Emulsifier / ME.019
pH-value	: 5.8
Viscosity	: 511.000 mPa.s Brookfield DV2T, Spindle 95, 5 rpm
Product form	: O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	46.60	several
	Glycerin	Glycerin	2.50	several
	Bentone Hydroclay 700	Hectorite, Xanthan Gum	0.75	Elementis
	Euxyl PE9010	Phenoxyethanol, Ethylhexylglycerin	0.90	Ashland
2	LIPEX® SheaSoft TR™	Butyrospermum Parkii (Shea) Butter	15.00	AAK
	Coconut Oil	Cocos Nucifera (Coconut) Oil	7.90	several
	Sunflower Wax	Helianthus Annuus (Sunflower) Seed Wax	8.00	Koster Keunen
	Sisterna A10E-C	Sucrose Tetrastearate Triacetate	5.00	Sisterna
	Sisterna SP70-C	Sucrose Stearate	2.00	Sisterna
	Sisterna SP30-C	Sucrose Distearate	2.00	Sisterna
	Caprylic/Capric Triglyceride	Caprylic/Capric Triglyceride	6.00	several
Tocomix L70-IP	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.05	Jan Dekker	
3	CefiraProtect	Betaine, Isomalt, Lactobacillus Ferment Lysate, Kefiran	3.00	CLR
	Touch Of Memories 343956-D	Parfum	0.30	Luzi

Production method

1. Disperse the Bentone Hydroclay 700 in the glycerin. Add to blend (of water and preservative) and mix with a propeller mixer at 500rpm for 10 minutes.
2. Heat (1) and (2) to 75°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. Cool down to room temperature under continuous stirring and adjust pH if necessary.

FORMULATION INFORMATION
ME.016 Mild After Sun Cream

Sistema SP30-C and Sistema 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	EPF 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, Helianthus Annuus (Sunflower) Seed Oil	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
Aqua Luna 357576		Parfum	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.
3. Heat (1) to 75°C.
4. Heat (2) to 70°C.
5. Add (2) to (1) while homogenising.
6. Cool down to 40°C while stirring.
7. Add (3) and homogenise shortly until the ingredients are incorporated.
8. Cool down to room temperature while stirring.
9. 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 better 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 Glycerin 99% Bentone Hydroclay 700	Aqua Glycerin Hectorite, Xanthan Gum	65.50 4.00 1.00	several several Elementis
2	Sistema SP30-C Sistema SP70-C Cetearyl Alcohol Sweet Almond Oil Avocado Oil Jojoba Oil Tocomix L70-IP	Sucrose Distearate Sucrose Stearate Cetearyl Alcohol Prunus Amygdalus Dulcis (Sweet Almond) Oil Persea Gratissima (Avocado) Oil Simmondsia Chinensis (Jojoba) Seed Oil Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	3.00 1.00 2.00 6.50 7.00 6.50 0.05	Sistema Sistema several several several several Jan Dekker
3	Sensiva Go Natural Soyamine Vibrant Herbs 261239	Caprylyl Glycol, Glyceryl Caprylate, Propanediol Water, Butylene Glycol, Glycine Soja (Soybean) Germ Extract Parfum	1.15 2.00 0.30	Ashland TriBeauté 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.

FORMULATION INFORMATION

ME.018 Sun Lotion SPF30

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

ME.018

Sun Lotion SPF30

ID : Main Emulsifier / ME.018
pH-value : 7.15
Viscosity : 59.600 mPa.s Brookfield DV2T, Spindle 94, 5 rpm
Product form : O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water Glycerin Actigum VSX 20 Sensiva SC80	Aqua Glycerin Sclerotium Gum, Xanthan Gum Propanediol, Caprylyl Glycol, Caprylhydroxamic Acid	50.50 3.00 0.60 1.50	several several Cargill Ashland
2	Sistema SP70-C Sistema SP30-C VS - Olive Squalane Lipex PreAct Jjoba Oil VASGel	Sucrose Stearate Sucrose Distearate Squalane Canola Oil Simmondsia Chinensis (Jojoba) Seed Oil Hydrogenated Ethylhexyl Olivatate, Hydrogenated Olive Oil Unsaponifiables, Hydrogenated Castor Oil, Sebacic Acid Copolymer	3.00 3.00 6.00 3.00 6.00 3.00	Sistema Sistema EFP Biotek AAK several EFP Biotek
3	Xperse 102	Zinc Oxide, Caprylic Capric Triglyceride, Polyhydroxystearic Acid	20.00	Evercare
4	Tocomix L70-IP Suncare 555828	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil Parfum	0.05 0.35	Jan Dekker Luzi

Production method

- Premix the Actigum VSX20 into the glycerin of (1).
- Add Sensiva SC80 to the water of (1).
- Disperse the premix of glycerin into (1) while homogenising during 20 minutes.
- Heat (1) to 75°C.
- Weigh the ingredients of (2) and heat to 75°C.
- Weigh the ingredients of (3) and add to the heated oil phase (2), homogenise during 3 minutes until good dispersion is obtained.
- Add (2+3) to (1) while homogenising continuously.
- Cool down to 40°C and add (4), homogenise shortly.
- Adjust pH if necessary.

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.012 Caring Foot Cream

Sisterna SP70-C can be used as a natural co-emulsifier for O/W emulsions as it improves the skin feel and increases the mildness of a formulation. It is also a good way of using the benefits of sucrose esters more economically, e.g. for mass market products. Furthermore Sisterna SP70-C also has selective antimicrobial activity against microorganisms causing athlete's foot (foot fungus) and odour formation.

CoE.012

Caring Foot Cream

ID : Co-emulsifier / CoE.012
pH-value : 5.20
Viscosity : 91.000 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form : O/W

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised water Glycerin (99%) Keltrol CG-SFT Genuvisco CG131	Aqua Glycerin Xanthan Gum Carrageenan	71.60 2.00 0.20 0.20	several several CP Kelco CP Kelco
2	Sistema SP70-C Dermofeel® GSC Cetearyl Alcohol Sunflower Oil Avocado Oil GSO Light Dermofeel Toco 70 Non-GMO	Sucrose Stearate Glyceryl Stearate Citrate Cetearyl Alcohol Helianthus Annuus (Sunflower) Seed Oil Persea Gratissima Oil Vitis Vinifera Seed Oil Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	2.00 2.00 2.00 7.00 3.00 8.00 0.50	Sistema Evonik several several several EFP Biotek Dr. Straetmans
3	Euxyl K712 Pleasant Green 234417	Aqua, Sodium Benzoate, Potassium Sorbate Parfum	1.20 0.30	Ashland Luzi
4	Citric Acid (20% sol.)	Citric Acid	q.s.	several

Production method

- Mix the components of (1) while stirring and heat to 75°C.
- Mix the components of (2) while stirring and heat to 75°C
- Add (2) to (1) while homogenising with a high shear mixer for 3 minutes.
- Cool down to 40°C while slowly stirring, then add (3) with constant stirring.
- Homogenise shortly with a high shear mixer for 1 minute.
- Cool further to room temperature with constant stirring.
- Adjust pH if necessary with (4) pH 5-5.5.

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 Tetraesterate 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 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	Biotek
Dermofeel Toco 70 non GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.50	Dr. Straetmans	
3	Vegetable Alternative to Lanolin	Butyrospermum Parkii (shea butter), Glyceryl Rosinate, Olea Europaea (Olive) Oil unsaponifiables	3.50	EFP Biotek
	Fragile Green 260906-A	Parfum	0.30	Luzi
	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 homogenizing
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.011 Natural Baby Lotion

A soft and easy spreadable lotion due to the fact that Sisterna SP01-C as a co-emulsifier improves the spreading properties, eliminates the oily or greasy sensation and enhances the after skin feel. As it does not give much viscosity build-up by itself, you can make thin W/O lotions (or increase the viscosity by adding butters).

CoE.011

Natural Baby Lotion

ID	: Co-emulsifier / CoE.011
pH-value	: Not applicable
Viscosity	: 5.400 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form	: W/O

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water Magnesium Sulfate 7H ₂ O Glycerin (99%)	Aqua Magnesium Sulfate Heptahydrate Glycerin	61.75 0.70 3.00	several several several
2	Sisterna SP01-C Arlacel 1690 VS- Olive Squalane Organic Calendula Oil Caprylic Capric Triglyceride Jojoba Oil Dermofeel Toco 70 Non-GMO	Sucrose Polystearate Sorbitan Isostearate, Polyglyceryl-3 Polyricinoleate Squalane Glycine Soja (Soybean) Oil, Calendula Officinalis Flower Extract, Tocopherol Caprylic/Capric Triglyceride Simmondsia Chinensis (Jojoba) Seed Oil Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	2.00 4.00 11.00 2.50 11.00 2.50 0.05	Sisterna Croda EFP Biotek CLR several several Dr. Straetmans
3	Mamas Darling 239778-A Sensiva PA 40	Parfum Phenylpropanol, Propanediol, Caprylyl Glycol, Tocopherol	0.30 1.20	Luzi Ashland

Production method

- Mix (1) and heat until 75°C.
- Mix (2) and heat to 70°C.
- Add (1) slowly to (2) and homogenise for 5 minutes with a high shear mixer.
- Cool down to 35°C while stirring and add (3).
- Homogenise shortly with a high shear mixer for 1 minute.
- Cool down to room temperature while slowly stirring.

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
- Sisterna PS750-C

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.007 High Viscous Light Cream

Simple and effective formulation with Sisterna SP70-C, showing the high 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 the highest viscosity possible. Include a hydrocolloid that gives a good viscosity build up to boost it even more. Tips and tricks to achieve a high viscosity: take a close look at the thinning behaviour of preservatives, actives and perfumes!

CE.007

High Viscous Light Cream

ID	: Cold emulsification / CE.007
pH-value	: 5.45
Viscosity	: 63.200 mPa.s Brookfield DV2T, Spindle 93, 5 rpm
Product form	: O/W – Cold production

	Ingredient	INCI-name	% w/w	Supplier
1	Deionised Water	Aqua	31.50	several
	Glycerin	Glycerin	3.00	several
	Bentone Hydroclay 700	Hectorite, Xanthan Gum	1.50	Elementis
	Sensiva SC80	Propanediol, Caprylyl Glycol, Caprylhydroxamic Acid	1.00	Ashland
2	CCT Oil	Caprylic Capric Triglycerides	59.70	several
	Sisterna SP70-C*	Sucrose Stearate	3.00	Sisterna
	Sweet Escape 233206-A	Parfum	0.30	Luzi

* Alternative grade: [Sisterna PS750-C](#) (INCI: [Sucrose Palmitate](#)). Viscosity: 56.100 mPa.s

Production method

1. Premix the Bentone Hydroclay 700 into the glycerin of (1).
2. Add Sensiva SC80 to the water of (1).
3. Disperse the premix of glycerin into (1) under paddle missing for 20 minutes.
4. Mix (2) in given order while stirring to homogeneous solution.
5. Add (2) into (1) while homogenising.
6. Adjust 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.

FORMULATION INFORMATION

CE.008 Simple & Effective Lotion

Creating simple but effective formulations with a short INCI list is possible with Sisterna PS750-C (and Sisterna SP70-C). It is mild on the skin, increases moisturisation and gives a soft skin feel. You can also produce in an environmental friendly way as it is cold processable, while also being readily biodegradable. Perfect for making a no-nonsense cosmetic product.

CE.008

Simple & Effective Lotion

ID	: Cold emulsification / CE.008
pH-value	: 5.06
Viscosity	: 7.760 mPa.s Brookfield DV2T, Spindle 92, 5 rpm
Product form	: O/W – Cold production

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin	Glycerin	3.00	several
	Actigum VSX 20	Sclerotium Gum, Xanthan Gum	0.50	Cargill
	Deionised Water	Aqua	59.80	several
	Optiphen BSB-W	Benzyl Alcohol, Sodium Benzoate, Potassium Sorbate, Aqua	0.90	Ashland
	D-Panthenol 75 W	Panthenol, Citric Acid, Aqua	3.00	BASF
2	VS - Olive Squalane	Squalane	30.00	EFP Biotek
	Sisterna PS750-C*	Sucrose Palmitate	2.50	Sisterna
	Nourishing Seeds 120009	Parfum	0.30	Luzi
3	Citric Acid (10% Aq. Sol.)	Citric Acid	q.s.	several

* Alternative grade: [Sisterna SP70-C](#) (INCI: [Sucrose Stearate](#)). Viscosity: +/- 8.000 mPa.s

Production method

1. Prepare a premix of Actigum VSX 20 and glycerin.
2. Weigh all remaining ingredients of (1). Add the premix to (1) under continuous stirring.
3. Homogenize for approximately 10 minutes, until the Actigum VSX 20 is fully and uniformly dispersed.
4. Mix (2) in given order and homogenise until Sisterna PS750-C is well dispersed into the oil.
5. Add (2) into (1) while homogenising.
6. 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
- Sisterna PS750-C
- Sisterna L70-C (in combination with SP70-C or PS750-C)

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.006 Good Night Facial Cleanser

A facial cleanser that turns into a milk on the skin when in contact with water. Combining Sisterna SP70-C and Sisterna L70-C gives a lower viscosity which makes it easier to apply on the designated area. Washing of the gel, turning into a milk, gives a velvet-like after feel on the skin.

GE.006

Good Night Facial Cleanser

ID	: Gel-to-milk / GE.006
pH-value	: Not Applicable
Viscosity	: 35.000 mPa.s Brookfield DV2T, Spindle 95, 5 rpm
Water activity (a_w)	: 0,44
Product form	: Gel-to-milk

	Ingredient	INCI-name	% w/w	Supplier
1	Glycerin 99% Sisterna SP70-C Sisterna L70-C Deionised water	Glycerin Sucrose Stearate Aqua, Sucrose Laurate, Alcohol Aqua	31.20 1.00 2.50 5.00	several Sisterna Sisterna several
2	Caprylic/Capric Triglyceride Natural Care (342791-A)	Caprylic/Capric Triglyceride Parfum	60.00 0.30	several Luzi

Production method

1. Disperse Sisterna SP70-C into the glycerin. Add other ingredients of (1) in given order.
2. Add (2) to (1) very slowly while homogenising.

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 Jjoba Oil Tocomix L70-IP	Squalane Prunus Armeniaca (Apricot) Kernel Oil Butyrospermum Parkii (Shea) Butter, Glyceryl Rosinate, Olea Europaea (Olive) Oil Unsaponifiables Simmondsia Chinensis (Jjoba) Seed Oil Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	5.00 12.50 9.00 12.40 0.10	EFP Biotek several EFP 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
- Sisterna PS750-C

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
3	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
4	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 Almond Oil Jjoba Oil Dermofeel Toco 70 Non-GMO CAMOMILE 338572-A	Olea Europaea (Olive) Fruit Oil Prunus Amygdalus Dulcis (Sweet Almond) Oil Simmondsia Chinensis (Jjoba) Oil Tocopherol, Helianthus Annuus (Sunflower) Seed Oil Parfum	4.00 4.00 4.00 0.20 0.30	several several several Dr. Straetmans Luzi
3	Deionised Water Avicel PC611	Aqua Microcrystalline Cellulose, Cellulose Gum	75.00 1.50	several FMC Biopolymer
4	Euxyl PE9010 Citric Acid (10% Aq. Sol.)	Phenoxyethanol, Ethylhexylglycerin Citric Acid	1.00 q.s.	Ashland 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.011 Gel-Lotion Eye Serum

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

SE.011

Gel-Lotion Eye Serum

ID	: Serum / SE.011
pH-value	: 6.13
Viscosity	: 20.400 mPa.s Brookfield DV2T, Spindle 94, 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	75.60	several
	Clearogel SG ECO	Sclerotium Gum	1.00	MMP
	Keltrol CG SFT V	Xanthan Gum	0.30	CP Kelco
	Euxyl PE9010	Phenoxyethanol, Ethylhexylglycerin	1.00	Ashland
4	Citric Acid (20%)	Citric Acid	q.s.	several

* Alternative grade: [Sisterna PS750-C](#) (INCI: [Sucrose Palmitate](#)). Viscosity: +/- 17.000 mPa.s

Production method

1. Disperse Sisterna SP70-C into the glycerin.
2. Add (2) to (1) and homogenise with a high shear mixer for 1 minute.
3. Slowly add the Clearogel SG ECO and Keltrol CG SFT-V to the blend of water with preservative under medium shear. Then mix at the highest possible shear for 10 minutes.
4. Add oil in glycerin emulsion (1+2) to (3) while mixing.
5. Adjust pH if necessary with (4).

Formulation prepared via concentrated emulsification procedure.

FORMULATION INFORMATION

SE.012 Well-Ageing Serum

Concentrated serum with a small oil droplet size which is perfect for enabling a good skin penetration of the oil active. Having a lower oil phase makes it more transparent and this effect is best observed when the emulsion is slightly coloured.

SE.012

Well-Ageing Serum

ID	: Serum / SE.012
pH-value	: 5.3
Viscosity	: 2.000 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	5.00 2.00	several Sisterna
2	Caprylic Capric Triglyceride ASTACOS® OL50 Tocomix L70-IP	Caprylic Capric Triglyceride Simmondsia Chinensis Seed Oil, Haematococcus Pluvialis Extract, Lecithin, Helianthus Annuus Seed Oil, Tocopherol Tocopherol, Helianthus Annuus Seed Oil	0.80 0.10 0.10	several BDI-BioLife Science Jan Dekker
3	Deionised Water Euxyl PE9010 Clearogel SG ECO	Aqua Phenoxyethanol, Ethylhexylglycerine Sclerotium Gum	91.25 1.00 0.75	several Ashland MMP
4	NaOH (50% solution)	Sodium Hydroxide	q.s.	several

* Alternative grade: [Sisterna PS750-C](#) (INCI: [Sucrose Palmitate](#)). Viscosity: +/- 2.000 mPa.s

Production method

1. Disperse Sisterna SP70-C into the glycerin (1) at 70°C.
2. Add (2) to (1) at 70°C and homogenise.
3. Add the Clearogel SG ECO into cold water, stir for 10 minutes and heat until 70°C.
4. Add phase (1+2) to (3) while homogenizing.
5. Adjust pH if necessary with (4).

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

FORMULATION INFORMATION

MC.013 Micellar Cleansing Water

Sistema 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	Sistema 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	Sistema 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.

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%)	Glycerin	5.00	several
	Sisterna SP70-C	Sucrose Stearate	1.50	Sisterna
2	Olive Oil	Olea Europaea (Olive) Fruit Oil	2.00	several
	Almond Oil	Prunus Amygdalus Dulcis (Sweet Almond) Oil	2.00	several
	Joboba Oil	Simmondsia Chinensis (Jojoba) Oil	1.00	several
	Dermofeel Toco 70 Non-GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	0.25	Dr. Straetmans
	CAMOMILE 338572-A	Parfum	0.30	Luzi
3	Deionised Water	Aqua	85.45	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, Aqua	qs	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.

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.014 Dry Skin Paste

A paste-like anhydrous formulation which you can 'scoop' from the jar. Sisterna A10E-C improves the application of the paste by letting it melt on the skin, decreasing the oily and greasy sensation of oils, butters and waxes and also improving the oil absorption. The result is a soft and gentle skin feel.

AS.014

Dry Skin Paste

ID : Anhydrous / AS.014
pH-value : N/A
Viscosity : N/A
Product form : Anhydrous paste

	Ingredient	INCI-name	% w/w	Supplier
1	Apricot Oil	Prunus Armeniaca (Apricot) Kernel Oil	4.00	several
	Sunflower Oil	Helianthus Annuus (Sunflower) Seed Oil	12.50	several
	VS Olive Squalane	Squalane	8.00	EFP Biotek
	VAS	Hydrogenated Ethylhexyl Olivatate, Hydrogenated Olive Oil Unsaponifiables	6.00	EFP Biotek
	Jjoba Oil	Simmondsia Chinensis (Jjoba) Seed Oil	8.00	several
	Caprylic Capric Triglyceride	Caprylic Capric Triglyceride	34.50	several
	Dermofeel Toco 70 Non-GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	1.00	Dr. Straetmans
	SUW - Sunflower Wax	Helianthus Annuus (Sunflower) Seed Oil, Hydrogenated Vegetable Oil	4.00	EFP Biotek
	HSFO 2	Hydrogenated Sunflower Oil	6.00	EFP Biotek
	Sisterna A10E-C	Sucrose Tetraacetate Triacetate	15.00	Sisterna
	Beauty O'Clock 462360	Parfum	1.00	Luzi

Production method

1. Weigh the ingredients and heat until all ingredients are melted (75°C-80°C).
2. Stir the mixture for 20 min until homogeneous, stirring constantly.
3. Pour mixture in container and let it cool to room temperature. Viscosity is final after 48h.

FORMULATION INFORMATION

AS.013 Solid Sun Stick SPF20

A soft-touch suncare balm with easy pay-off and excellent oil absorption, providing a non-greasy, dry skin feel thanks 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 Tetrastearate 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.

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 Olivatate	15.00	EFP Biotek
	Sisterna A10E-C	Hydrogenated Olive Oil Unsaponifiables Sucrose Tetrastearate 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) See 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.009 Lipstick Milano

Sisterna 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 Sisterna A10E-C enables the formula to melt near skin temperature. Furthermore it helps reducing blooming and sweating of sticks. Sisterna 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
	Witarix MCT 60-40	Caprylic/Capric Triglyceride	25.15	IOI Oleo
	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 503980	Parfum	0.25	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.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

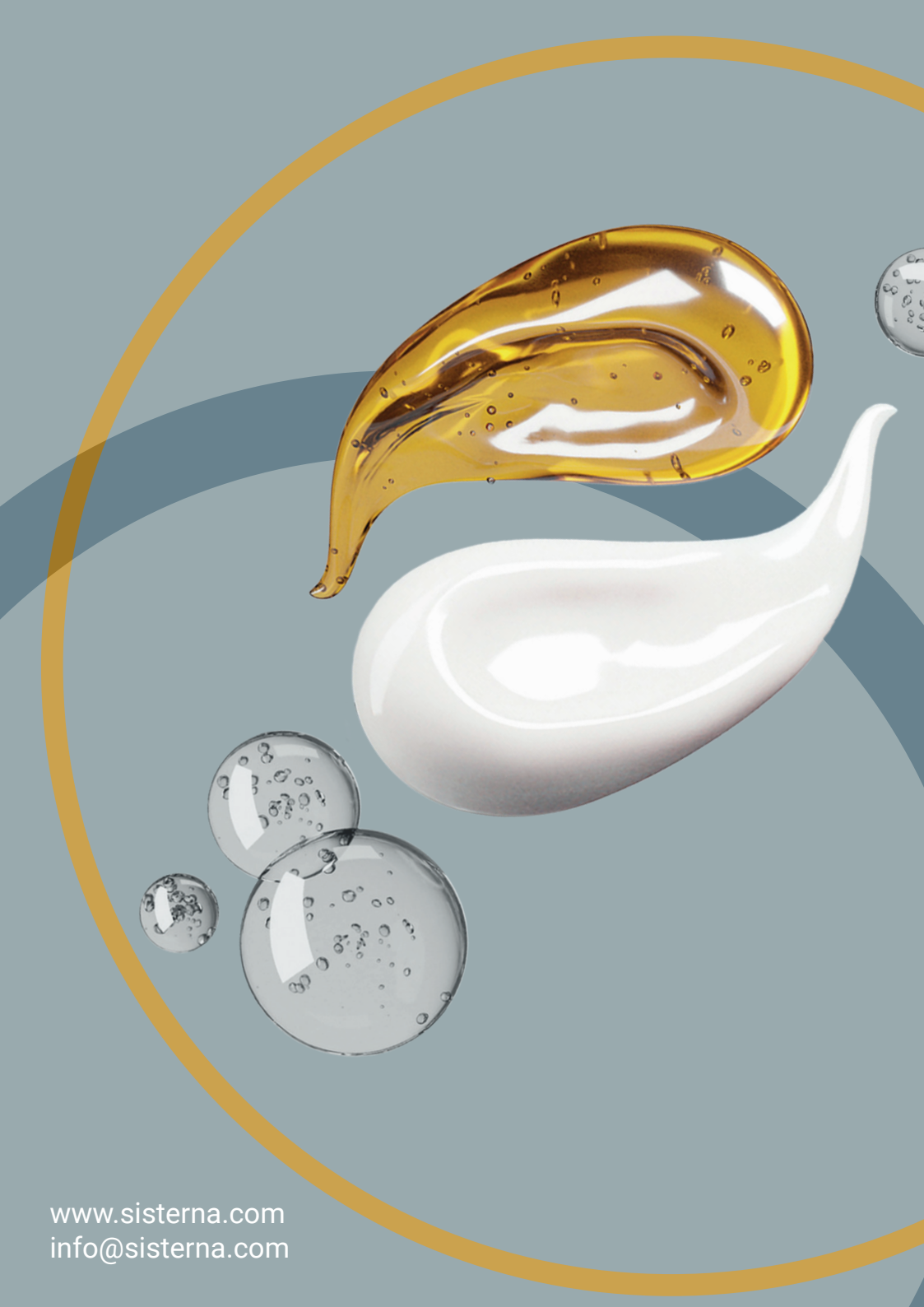
Natural Cream-to-Powder Blush

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 Tetraacetate Triacetate	10.00	Sisterna
2	Hombitan AFDC	Titanium Dioxide	11.40	Huntsman
	Unipure Red LC388	CI 77491	1.00	Sensient
	Unipure Pink LC583	CI 77742	3.80	Sensient
	Unipure Pink LC589	CI 77007	3.80	Sensient
3	Dermofeel Toco 70 Non-GMO	Tocopherol, Helianthus Annuus (Sunflower) Seed Oil	1.00	Dr. Straetmans
	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.



www.sisterna.com
info@sisterna.com