

IQL

The route to excellence



EMOLID ISN

**100% natural origin.
Low viscosity dry emollient.**



Cosmetagora 2024



Deforestation Free

Emolid ISN

PRODUCT INFORMATION

It is a unique not palm derived origin emollient which gives pleasant sensorial during application due to it's high degree of spreadability.

◆ **INCI Name:**

Methylheptyl Pelargonate

◆ **Origin:**

Natural origin Index: 1

◆ **Appearance:**

Colourless and odourless light ester.

◆ **Sensory Analysis:**

Silicone like emollient

◆ **Pour Point:**

-60 °C

◆ **Skin compatibility:**

Excellent

◆ **Refractive index:**

1,4350

COSMETIC INTEREST

- ◆ Silicone free formulations.
- ◆ Non palm content formulations.
- ◆ Luxurious feeling.
- ◆ Perfect dry time during application without greasy touch.
- ◆ Good spreadability.
- ◆ Excellent solubility in silicones, polar and non-polars oils.
- ◆ Natural cleansing ability.

PRODUCT SOLUBILITY

Vegetable oils

Mineral oil	S
Jobba Oil	S
Olive Oil	S
Castor Oil	S

Esters

Triethylhexanoin	S
Diisostearyl malate	S
Polyglyceryl-2 isostearate	AS
Polyglyceryl-2 diisostearate	S
Polyglyceryl-2 triisostearate	S
Polyglyceryl-2 tetraisostearate	S

Silicones

Cyclomethicone	S
Dimethicone (10cs)	S
Dimethicone (20cs)	AS
Dimethicone (100cs)	S
Dimethicone (350cs)	S

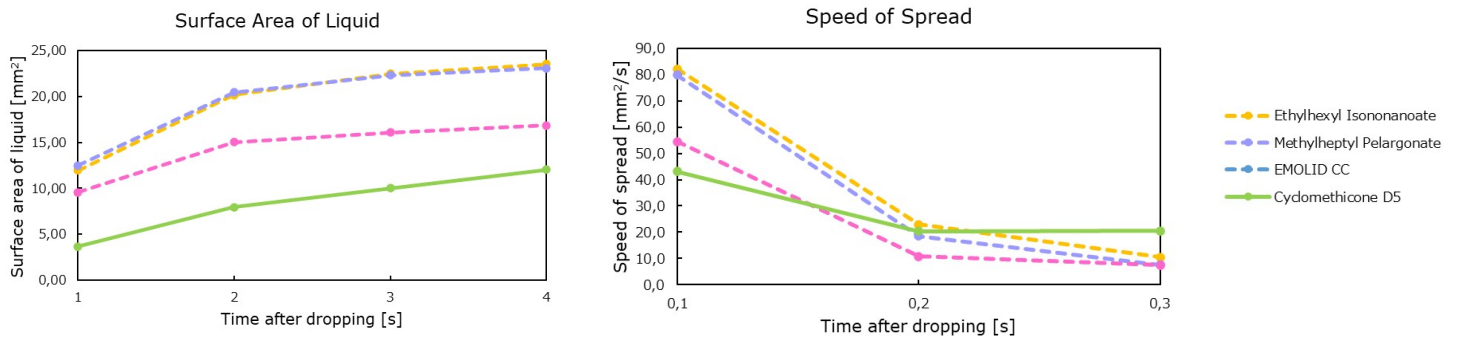
Others

Sorbitan Sesquioleate	S
Polysorbate 80	AS
Butylenglycol	IS
Ethanol	S
Glycerin	IS

S—Soluble AS—Almost soluble IS (D)—insoluble(dispersing) IS—Insoluble G—Gel

SPREADING ABILITY

A unique not palm derived origin emollient which gives pleasant sensorial during application due to it's high degree of spreadability.

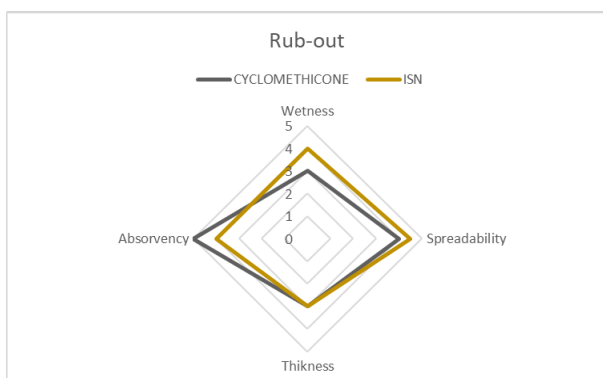


In these graphs, Emolid ISN was compared with a typical used silicone replacement ester of petrochemical origin, Ethylhexyl Isononanoate, and a low-viscosity silicone. The speed of Spread is very similar, but the surface area of the esters is higher characteristic needed to confer the lightnes feeling in a fatty acid based product.

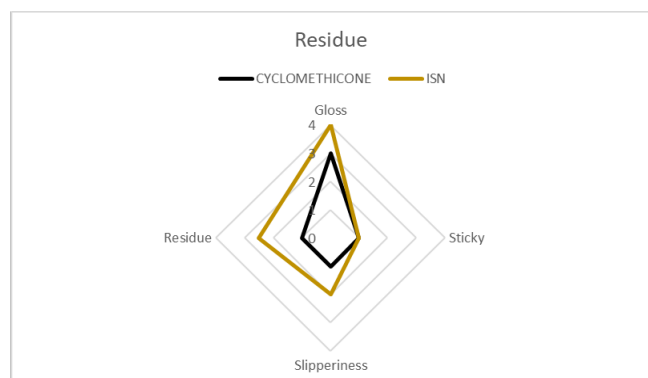
REPLACING SILICONES

Sensorial profile of Emolid ISN was compared with cyclomethicone.

Graphic 1: Comparison during application



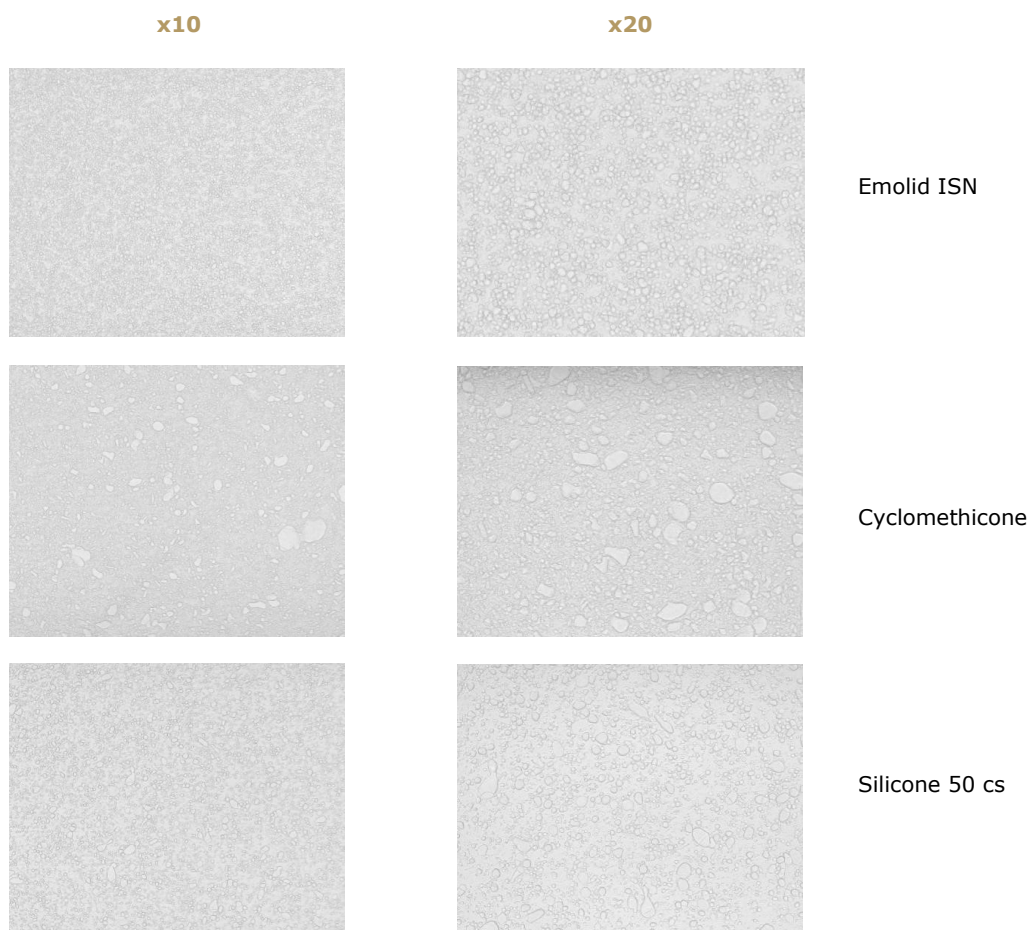
Graphic 2: Comparison after application



The sensorial during application is almost same, after application as Emolid ISN penetrates and Cyclomethicone evaporates there are light differences.

EMULSIONS FRIENDLY VS SILICONE

The photos down below show the size of the droplets on the emulsion using Emolid ISN, Cyclomethicone and Silicone 50 cs



The formula with Emolid ISN is very homogeneous so the formation of the emulsion is very stable.

This performance is thanks to the better solubility of the Emolid ISN which helps the incorporation of all the ingredients of the fatty phase and equilibrate better with the polarity of the emulsifier.

REPLACING SILICONES IN FORMULATIONS

Sensorial profile of Emolid ISN was compared with Silicone 50cs. Formulations E1-0070-14 and E1-0070-19 were evaluated.



The visual comparative of the creams is very similar, during application, sensorial difference is negligible.

After application, Emolid ISN shows better after-feeling effect being the smoothest and slipperiest.

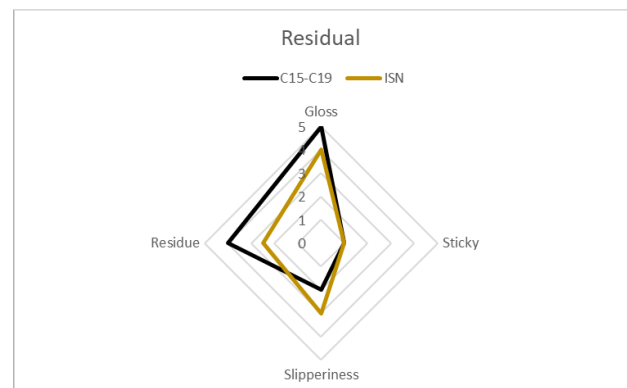
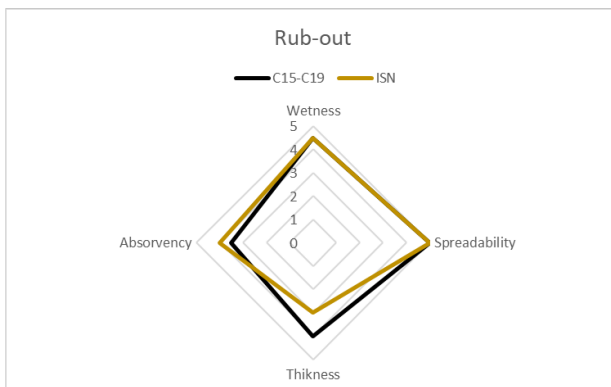
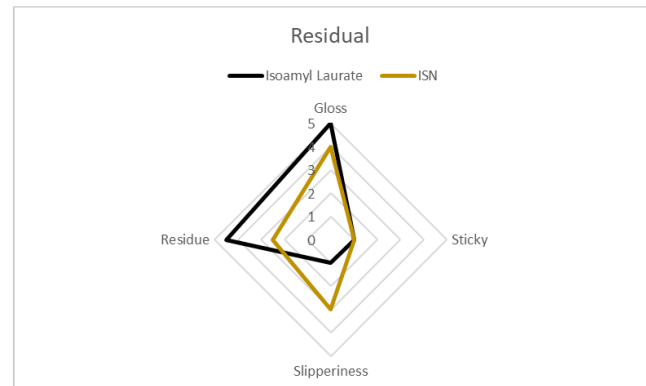
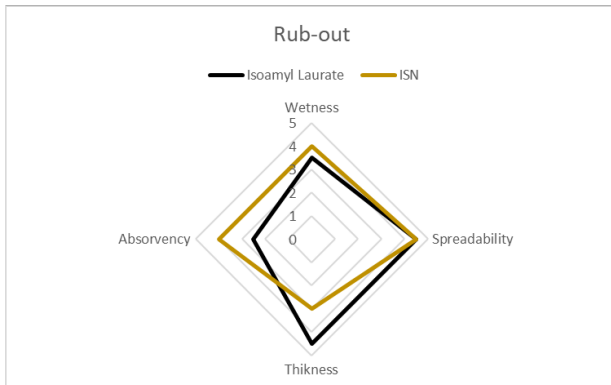
EMOLID ISN VS SILICONE 50CS

TRADE NAME	INCI	FUNCTION	W/W	W/W	Supplier
A					
Waglinol 1449 NG	Isononyl isononanoate	Emollient	1,00	1,00	IQL
Soldoc 3/92 HG	Triisostearin	Emollient	3,00	3,00	IQL
Emolid CC	Coco-caprilate/caprata	Emollient	1,50	1,50	IQL
Emolid DD	Dimer dilinoleyl dimer dilinoleate	Emollient	3,00	3,00	IQL
Emolid BDGA MB	Bis-diglyceryl polyacyladipate-2	Emollient	2,00	2,00	IQL
Alcohol 260	Cetearyl alcohol	Emulsifier	1,50	1,50	IQL
Lasemul 92 N 40	Glyceryl stearate	Emulsifier	1,00	1,00	IQL
Emolid ISN	Methylheptyl pelargonate	Emollient	5,00	-	IQL
Silicone 50 cs	Silicone 50 cs	Silicone	-	5,00	
Lasemul 400	PEG-8 stearate	Emulsifier	4,00	4,00	IQL
Lasemul 2/6000	PEG-150 distearate	Emulsifier	0,30	0,30	IQL
Tocopherol 100	Tocopherol	Antioxidant	0,25	0,25	Nishhin
B					
Water	Water	Carrier	58,25	58,25	
Glycerin	Glycerin	Humectant	2,00	2,00	
Niacinamide	Niacinamide	Active	1,00	1,00	
Urea	Urea	Active	2,00	2,00	
Hyaluronic acid	Hyaluronic acid	Active	1,00	1,00	
Symdiol 68	1,2-hexanediol, caprylyc glycol	Preservative	1,00	1,00	
C					
Waglinol 1449 NG	Isononyl isononanoate	Emollient	1,00	1,00	IQL
Carbopol ultrez 10	Carbomer	Rehology modifier	0,50	0,50	
D					
Water	Water		10,00	10,00	
Nomcort ZZ	Xanthan gum	Thickener	0,50	0,50	
E					
Perfume	Perfume	Perfume	0,20	0,20	
F					
NaOH	NaOH	pH adj	qs	qs	

1. Mix compounds from Phase A and heat 75-80 °C
2. Mix compounds from Phase B and heat 75-80°C
3. Disperse Carbopol in Waglinol 1449 NG
4. Disperse Nomcort ZZ in water until no lumps
5. Add phase C to B and homogenize 5 min at 4500-5000 rpm
6. Add phase D to B and homogenize 5 min at 4500-5000 rpm
7. Add phase A to B and homogenize 10 min at 6500-7000 rpm
8. Cool down to 38°C and add phase E and adjust pH to 5.0- 5.5

COMPARING EMOLID ISN VS MARKET SILICONE REPLACEMENTS

Sensorial test versus market vegetable silicone replacements.



In terms of spreadability other esters are able to reach similar sensorial but after feeling of Emolid ISN is unrivalled.

COLOR COSMETICS

Emolid ISN is a fast spreading emollient that leaves a minimally perceptible residual film on the skin

The usage of Emolid ISN in creams in color cosmetics it is specially recommended for BB or CC creams, long wear foundations, coverage concealers, serum powdered foundations, body foundations... in general any product containing pigments were a luminous skin-like Finnish is required.

Can be used with silicones in low modulate the final gloss of the applied product.



Cheek and lips liquid blush

Phase	Commercial name	INCI	%	% NATURAL. ISO 16128	% NATURAL. ISO 16129
A					
A	SOLDOC PG 336	Diisostearoyl Polyglyceryl-3 Dimer Dilino- leate	3,00%	100%	3,00%
A	NOMCORT NW	Behenyl behenate	0,90%	72%	0,65%
A	CERA CANDELILLA	Euphorbia Cerifera (Candelilla) Wax	2,10%	100%	2,10%
A	Berry wax	Rhus Verniciflua Peel Wax	4,00%	100%	4,00%
A	EMOLID ISN	METHYLheptyl PELARGONATE	25,20%	100%	25,20%
A	SALACOS 43V	Polyglyceryl-2 Triisostearate	10,00%	100%	10,00%
A	EMOLID DD	Dimer Dilinoleyl Dimer Dilinoleate	8,00%	100%	8,00%
A1	SALACOS HS-6C	Polyhydroxystearic Acid	0,50%	100%	0,50%
A1	EMOLID ISN	Methylheptyl pelargonate	30,00%	100%	30,00%
A1	SOFT TEX D&C Red 7	CI 15850 (Red 7 Lake)	0,38%	0%	0,00%
A1	SOFT TEX Titanium Dioxide	CI 77891 (Titanium dioxide)	9,62%	100%	9,62%
B					
B	Silica BEAD SB-300	Silica	6,00%	100%	6,00%
C					
C	AROMA	FLAVOUR	0,30%	0%	0,00%
			100,00%		99,07%

PROCEDURE

- 1 Mix phase A and heat it up to 95°C
- 2 Predisperse phase A1 in turrax for 2min 10K rpm
- 3 Add A1 in A and heat the mixture to 95°C
- 4 Mix for 30 min
- 5 Homogenize with turrax during 1 min - 10.000 rpm
- 6 Let it cool while mixing and add phase B and C



Oils with low viscosity increase the slipperiness of a lipstick.

Emolid ISN in sticks imparts lubricity, reduces the coefficient of friction and reduces dragging. It can be also used in the pigment premix as a base fluid when lower viscosities are required.



Natural rosé Lipstick

Phase	Commercial name	INCI	COMP. (%)	% Nat. MP	% NATURAL. ISO 16128
A					
A	SOLDOC PG 336	Diisostearoyl Polyglyceryl-3 Dimer Dilino- leate	3,00%	100%	3,00%
A	Candelilla wax	Candelilla wax	9,80%	100%	9,80%
A	Nomcort NW	Behenyl behenate	4,20%	100%	4,20%
A	SALACOS TG810S	Caprylic/Capric/succinic triglyceride	15,00%	100%	15,00%
A	Emolid ISN	Methylheptyl pelargonate	19,00%	100%	19,00%
A	SALACOS 334	Caprylic/Capric/Myristic/Stearic Triglyce- ride	4,00%	100%	4,00%
B					
B	SALACOS HS-6C	Polyhydroxystearic Acid	0,50%	100%	0,50%
B	SOLDOC VF 3/92 HG	Triisostearin	34,00%	100%	34,00%
B	PIGMENT RED 7	CI 15850:1	1,53%	0%	0,00%
B	TiO2	Titanium dioxide	8,47%	100%	8,47%
C	Flavour (Deliliah)	FLAVOUR	0,500%	0%	0,00%
			100,00%		97,97%

Procedure

- 1 Mix phase A and heat it to 95°C
- 2 Grind the pigments in the grinder and add to the liquid of phase B
- 3 Predisperse phase B with turrax, 2min 10K rpm.
- 4 Add phase B to phase A and heat it to 95°C
- 5 Mix for 1h 30 min at 95°C
- 6 Homogenize with turrax during 1 min - 10.000 rpm
- 7 Let it cool while mixing and add phase C



FACIAL OILS & OIL BASED SERUMS

Emolid ISN is ideal for formulations of natural facial oils to modulate extensibility and residual oiliness.

It has good compatibility with plant-derived and essential oils extracted from fruits, seeds and flowers of many aromatic plants.

Emolid ISN it is suitable for all skin types, it is not comedogenic, so it does not clog the pores and don't leave the skin greasy.

Emolid ISN it is compatible with natural oils as jojoba, linen, chia, rosehip, Virgin marula, black cumin and meadowfoam oils. Emolid ISN boosts its absorption for a deep nourishing and softening of the skin.



Emolid ISN in combination with natural oils is ideal for fighting the dull appearance of skin and giving it firmness, elasticity and luminosity.

Oil serum prototype formulation

Phase	Product	INCI	Composition
A			
A	EMOLID ISN	Methylheptyl Pelargonate	63,00%
A	EMOLID DD	Dimer dilinoleyl dimer dilinoleate	0,50%
A	EMOLID CC	Coco-Caprylate/caprate	17,00%
A	Vegetable Squalene	Squalene	2,00%
A	Rosehip	Rosa Canina Fruit Oil	1,00%
A	Tea tree oil	Helianthus Annuus Seed oil, Camellia Sinensis Leaf Extract, Ascorbyl Palmitate, BHT	0,05%
A	Fucus	Fucus Vesiculosus Extract (and) Helianthus Annuus seed oil (and) Ascorbyl palmitate	0,50%
A	Karanja Bio Oil	Pongamia galabra seed oil	0,50%
A	Coenzyme Q10	Ubiquinona	0,05%
A	Vitamin F	Zea Mays, Rosa Moschata Seed Oil, Rosmarinus Officinalis Leaf Extract, Helianthus Annuus Seed Oil.	0,10%
A	WAGLINOL 3/9208	Tricaprylin	15,00%
B			
B	Parfum	PARFUM	0,30%
			100,00%

1- Mix fase A

2- Add fase B



HAIR OIL

Introducing hair oil into your regimen can help restore your hair's moisture and nourish the hair and scalp.

Some hair textures are better suited to handle thicker hair oils, thicker hair types can use heavier oils like olive oil to trap moisture, Emolid ISN due to its low oiliness low viscosity is ideal to modulate the product consistency.



Emolid ISN can be combined with natural oils for different purposes as example:

Dry, dull hair: coconut oil, argan oil, jojoba oil, almond oil, olive oil, grapeseed oil

Dry scalp: jojoba oil, lavender oil, lemongrass oil

Damaged hair: coconut oil, jojoba oil, almond oil, olive oil

Hair loss: almond oil, grapeseed oil, lemongrass oil

Dandruff-prone hair: jojoba oil, almond oil, olive oil, grapeseed oil, lemongrass oil

Slow-growing hair: coconut oil and almond oil

Emolid ISN is capable of attaching to hair and replacing the lipid layer that has been washed off by chemical treatments and harsh cleansing products. It doesn't build up and has a very light feel. Although it is not a stand-alone hair oil conditioner, it improves wet combability and reduces static electricity.

Application: Hair shampoo, conditioner, hair oil, anti-static preparations, combing and anti-frizz preparations, bath & body products

Hair oil prototype formulation

Phase	Product	INCI	Composition
A			
A	EMOLID ISN	Methylheptyl Pelargonate	65,00%
A	EMOLID DD	Dimer dilinoleyl dimer dilinoleate	0,50%
A	EMOLID CC	Coco-Caprylate/caprate	17,20%
A	Vegetable Squalene	Squalene	2,00%
A	WAGLINOL 3/9208	Tricaprylin	15,00%
B			
B	Parfum	PARFUM	0,30%
			100,00%

1- Mix fase A

2- Add fase B

SILICONE BASED HAIR OIL

Silicones work well for dry hair by creating a layer to keep hair hydrated from within.

However this protective layer also blocks other nourishing ingredients from penetrating deep into the hair follicle.



So, over a longer time frame, silicones can also cause build-up on your hair, resulting in a dry feel and dull appearance.

However this situation can be prevented if the roots of the hair are nourished with regular natural oils.

Here is where Emolid ISN plays with silicones. Thanks to its good compatibility with most of silicones natural emollience can be added to the silicone based product without giving a heavy feeling.

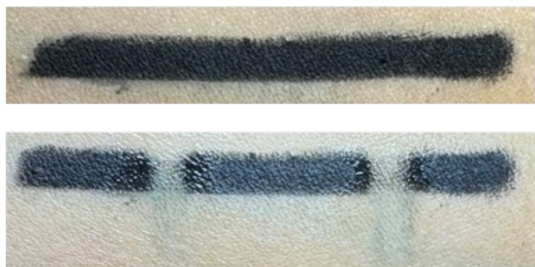
Depending on the type of silicone based oil or formulation quantities used can move from 0,25% or 2%.

CLEANSING OIL & GELS

Ethylhexyl Pelargonate (Soldoc VF 9 N), a petrochemical derived molecule with high performance in cleansing products, was compared to Emolid ISN.

Waterproof eyeliner and Waterproof lipstick were used in this test. A line of each one was drawn in the forearm. Then, two cotton stick each one with a pure emollient were pushed and moved down in the skin at the same time, strength and speed.

Waterproof eyeliner



Soldoc VF 9N

Emolid ISN

Waterproof Lipstick



Soldoc VF 9N

Emolid ISN

Emolid ISN has a good cleansing ability.

Cleansing gel formulation

Emolid ISN is the perfect emollient for achieve the perfect spreadability in the product without stickiness

TRADE NAME	INCI	FUNCTION	W/W	Supplier
A				
Emolid ISN	Methylheptyl pelargonate	Emollient	20,00	IQL
Waglinol 2/7680	Propylene Glycol Dicaprylate/Dicaprate	Emollient	15,00	IQL
Soldoc VF 2/80	Neopentyl Glycol Dicaprylate/Dicaprate	Emollient	15,00	IQL
Emolid BDGA MB	Bis-diglyceryl polyacyladipate-2	Emollient	1,00	IQL
Emolic CC	Coco-caprylate caprate	Emollient	1,50	IQL
Salacos 334	Caprylic/Capric/Myristic/Stearic Triglyceride	Emollient	0,50	Nishhin
Tocopherol	Tocopherol	Antioxidant	0,50	
B				
Water	Water	Carrier	13,00	
Glycerin	Glycerin	Humectant	13,00	
Butylenglycol	Butylenglycol	Humectant	11,90	
Nomcort HK-P	Polyglyceryl-10 behenate/eicosandioate	Thickener	6,50	Nishhin
Niacinamida	Niacinamida	Active	1,00	
Hyaluronic acid	Hyaluronic acid	Active	0,20	
Symdiol 68	1,2-hexanediol, caprylic glycol	Preservative	0,70	
C				
Perfume	Perfume	Perfume	0,20	

1. Mix ingredients from phase A and heat to 80°C
2. Mix ingredients from phase B and heat to 80°C
3. Add phase B to A slowly and cool down to 38°C
4. Add phase C. Adjust pH 6-6,5



Cleansing oil formulation

Phase	Commercial name	INCI	COMPOSITION	% NATURAL. ISO 16128	% NATURAL. ISO 16129
A					
A	EMOLID ISN	Methylheptyl pelargonate	42,50%	100,00%	42,50%
A	WAGLINOL 3/9280	CAPRYLIC/CAPRIC TRIGLYCERIDE	42,00%	100,00%	42,00%
A	EMOLID CC	COCO-CAPRYLATE/ CAPRATE	6,00%	0,00%	0,00%
A	SALACOS GE-318	PEG-20 Glyceryl Triisostearate	5,00%	50,00%	2,50%
A	SOLDOC PG 336	Diisostearoyl Polyglyceryl-3 Dimer Dilinoleate	2,00%	100,00%	2,00%
A	SOLDOC VF 4/18 HG	Pentaerythrityl Tetraisostearate	2,00%	94,00%	1,88%
A	PERFUME	PARFUM	0,50%	0,00%	0,00%
			100,00%		90,88%

PROCEDURE

- 1 Mix phase A





Emolid ISN was the main ingredient in the Paris Cosmet'Agora exhibition 2024 formulation award.

The formula was presented by Summit cosmetics Europe. Inspired by the Cosmet'Agora Formulation Competition's



98,3%

INGREDIENT OF NATURAL ORIGIN



SUMMIT
COSMETICS

	NOM COMMERCIAL / TRADE NAME	INCI	N _{oi} *	QT [%]
A	CAMELLIA BUTTER-R (1)	CAMELLIA OLEIFERA SEED OIL (AND) C10-18 TRIGLYCERIDES	1	5.00
	EMOLID ISN (2)	METHYLHEPTYL PELARGONATE	1	54.096
	MFULA MARULA SEED OIL REFINED (3)	SCLEROCARYA BIRREA (MARULA) SEED OIL	1	8.50
	NOMCORT® HK-G (4)	GLYCERYL BEHENATE/EICOSADIOATE	0.72	6.00
	NATURECHEM® GMHS (5)	GLYCERYL HYDROXYSTEARATE	0.99	0.80
	TWINONE P5-2000 (6)	SILICA	1	7.00
	SPHERICA HC (7)	SILICA	1	4.00
	OSSFEC (7)	ORYZA SATIVA (RICE) STARCH (AND) ORYZA SATIVA (RICE) BRAN WAX	1	4.00
B	VIAPURE HOPS (8)	HUMULUS LUPULUS (HOPS) EXTRACT (AND) LINOLEIC ACID (AND) LINOLENIC ACID	1	0.50
	SOLDOC PG 410 MB (2)	POLYGLYCERYL-4 CAPRATE	1	3.00
	SOLDOC PGPR (2)	POLYGLYCERYL-3 POLYRICINOLEATE	1	3.00
	TERRE DE CEDRAT - LIQUID EXTRACT (9)	AQUA (AND) PROPANEDIOL (AND) CITRUS MEDICA VULGARIS FRUIT EXTRACT (AND) ASCORBIC ACID	0.99	2.00
C	MOUNTAIN PEPPER LEAF EXTRACT(GPD)-RSPO (10)	TASMANNIA LANCEOLATA LEAF EXTRACT	1	1.00
	BLONDIEE® SATIN BRONZE N-2200D (6)	MICA (AND) IRON OXIDE	1	0.004
	TOCOPHEROL 100 (4)	TOCOPHEROL	1	0.10
	FRAGRANCE BALSAM WOOD*	PARFUM/FRAGRANCE	1	1.00
			TOTAL	100.00

*N_{oi} - ISO 16128 - Indice d'Origine Naturelle / Natural Origin Index

**Fragrance provided by BELL

1st Prize - Summit Cosmetics Europe for ODE L'Onguent Dynamisant, a nourishing and protective toning balm-in-oil, infused with a blend of Corsican citron extracts, Tasmanian pepper, hops, camellia butter and marula oil. The vegan formula, composed of more than 98% ingredients of natural origin, comes in the form of a balm and transforms into a silky oil when touched. Using a gua-sha allows you to delicately massage the legs and awaken the skin. According to Summit Cosmetics, the formula soothes the epidermis by strengthening the skin barrier, while toning and stimulating microcirculation.





IQL

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