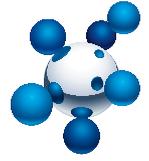


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COSMACOL® esters and specialties

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1. COSMACOL® esters

COSMACOL esters are lipophilic emollients based on linear or mono-branched primary fatty alcohols. This product line includes raw materials with different skin feeling, from light to rich, and offers ingredients for a wide range of finished cosmetics. COSMACOL esters show generally good spreadability and non-greasy feel.

COSMACOL® ELI

INCI name: C12-13 Alkyl Lactate

COSMACOL ELI is versatile polar emollient suitable for both personal cleansing and skin care formulations.

This ester exhibits some peculiar activities of lactic acid derivatives, as moisturising and mild keratolytic effect, and therefore it is suitable for skin care products targeted for different types of skin, from dry to greasy.

COSMACOL ELI shows also thickening effect on SLES-Betaine system as well as anti-irritant properties and can be used for various personal care products, including lines for delicate and atopic skins.

In addition COSMACOL ELI is also a mild body odour reducing agent which allows to lower the amount of commonly used actives in antiperspirants and deodorants.

COSMACOL ELI is also used as wetting and dispersing agent in make-up.

Packaging: 25 and 190 kg iron drums; 900 kg IBC.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 2 years from production date for product in its original sealed package.

COSMACOL® ESI

INCI name: Tridecyl Salicylate

COSMACOL ESI is an emollient particularly suitable for hair care products; in shampoo formulations it supports effect of anti-dandruff agents while in hair dyeing it improves color stability.

COSMACOL ESI is also used in sunscreen products for its ability in filter dispersion as well as for its positive effect on UV filters stability.

Because of its keratolytic effect COSMACOL ESI is used as pore cleanser.

This ester exhibits a very light skin feeling.

Packaging: 25 kg plastic drum and 190 kg iron drum.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 2 years from production date for product in its original sealed package.

		COSMACOL® ELI	COSMACOL® ESI
Sales specification			
Appearance @ 20° C	visual	clear liquid	clear liquid
Colour	[APHA]	50 max	70 max
Purity as ester	[wt. %]	88 min	90 min
Free alcohol	[wt. %]	12 max	10 max
Acid value	[mg KOH/g]	3.0 max	3.0 max
Water	[wt. %]	0.5 max	0.5 max
Additional properties			
Density @ 20° C	[g/cm ³]	approx. 0.923	approx. 0.971
Viscosity @ 20° C	mPa*s	approx. 21	approx. 19
Pour point	[° C]	< -55	< -58
Flash point	[° C]	approx. 156	approx. 164
Refractive Index @ 20° C		approx. 1.445	approx. 1.453
Total aerobic microbial count	CFU/g	100 max	100 max
Total yeasts/moulds count	CFU/g	10 max	10 max

COSMACOL® ECI

INCI name: Tri-C12-13 Alkyl Citrate

COSMACOL ECI exhibits light touch and is therefore suitable in skin care products for greasy skin where it also contributes to regulate sebum level.

This ester can also be used in antiperspirant/deodorant formulations to prevent stickiness of inorganic salts.

COSMACOL ECI, due to its hydrophilic groups, is used also as dispersing agent for pigments in make up products as well as for UV filters in sunscreen formulation.

Packaging: 25 and 190 kg iron drums.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 3 years from production date for product in its original sealed package.

COSMACOL® EOI

INCI name: C12-13 Alkyl Ethylhexanoate

COSMACOL EOI is a light emollient that can be used as alternative to triglycerides and isopropyl myristate to improve spreadability on the skin.

Packaging: 25 kg plastic drum and 190 kg iron drums.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 3 years from production date for product in its original sealed package.

COSMACOL® EBI

INCI name: C12-15 Alkyl Benzoate

COSMACOL EBI is highly spreading emollient providing very light touch.

It is particularly suitable for sunscreen and make-up products for its ability to disperse respectively UV filters and pigments.

Packaging: 25 kg plastic drum and 190 kg iron drum; 950 kg IBC.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 3 years from production date for product in its original sealed package.

		COSMACOL® ECI	COSMACOL® EOI	COSMACOL® EBI
Sales specification				
Appearance @ 20° C	visual	clear liquid	clear liquid	clear liquid
Colour	[APHA]	50 max	50 max	50 max
Purity as ester	[wt. %]	90 min	90 min	90 min
Free alcohol	[wt. %]	10 max	10 max	10 max
Acid value	[mg KOH/g]	3.0 max	3.0 max	3.0 max
Water	[wt. %]	0.5 max	0.5 max	0.5 max
Additional properties				
Density @ 20° C	[g/cm ³]	approx. 0.933	approx. 0.859	approx. 0.933
Viscosity @ 20° C	mPa*s	approx. 137	approx. 8	approx.16
Pour point	[° C]	approx. -51	< -60	approx. -27
Flash point	[° C]	approx. 178	approx. 176	approx. 190
Refractive Index @ 20° C		approx. 1.458	approx. 1.442	approx.1.485
Total aerobic microbial count	CFU/g	100 max	100 max	100 max
Total yeasts/moulds count	CFU/g	10 max	10 max	10 max

COSMACOL® EMI

INCI name: Di-C12-13 Alkyl Malate

COSMACOL EMI shows good moisturising properties providing also benefit in treatment of aged skin as well as greasy skin where it helps to regulate sebum level.

This ester provides rich texture without greasy feeling on the skin even in combination with high amount of waxy components.

COSMACOL EMI is suitable also in hair care formulations improving silkiness and overall dry manageability of the hair.

Packaging: 25 and 190 kg iron drums; 900 kg IBC.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 2 years from production date for product in its original sealed package.

COSMACOL® ETI

INCI name: Di-C12-13 Alkyl Tartrate

COSMACOL ETI is a polar emollient effective as dispersing agent for inorganic pigments in make-ups thus improving overall stability of final formulation and ability to form thinner film.

This di-ester is also reliable alternative to castor oil in make up products to achieve better spreadability.

COSMACOL ETI is also used in hair care products where it improves glossing effect.

Packaging: 25 kg plastic drum and 190 kg iron drums.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 2 years from production date for product in its original sealed package.

		COSMACOL® EMI	COSMACOL® ETI
Sales specification			
Appearance @ 20° C	visual	clear liquid	clear liquid
Colour	[APHA]	50 max	50 max
Purity as ester	[wt. %]	90 min	90 min
Free alcohol	[wt. %]	10 max	10 max
Acid value	[mg KOH/g]	3.0 max	3.0 max
Water	[wt. %]	0.5 max	1.0 max
Additional properties			
Density @ 20° C	[g/cm ³]	approx. 0.933	approx. 0.956
Viscosity @ 20° C	mPa*s	approx. 88	approx. 291
Pour point	[° C]	approx. -51	< -39
Flash point	[° C]	approx. 174	approx. 168
Refractive Index @ 20° C		approx. 1.456	approx.1.459
Total aerobic microbial count	CFU/g	100 max	100 max
Total yeasts/moulds count	CFU/g	10 max	10 max

COSMACOL® ETLP

INCI name: Dimyristyl Tartrate

COSMACOL ETLP is a high melting emollient. This waxy ester is suitable to improve stability of O/W emulsions and due to its polarity it can be used as spreading emollient in make up products as well.

Packaging: 25 and 100 kg fiber drums.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 3 years from production date for product in its original sealed package.

COSMACOL® ECL

INCI name: Tri-C14-15 Alkyl Citrate

COSMACOL ECL is a waxy emollient used as viscosity improver of O/W formulations.

It also shows mild keratolytic effect being suitable for product for atopic skin.

COSMACOL ECL can be used in make up products as lipsticks and pencils to improve stability against blooming.

COSMACOL ECL is also effective in reducing the stickiness of formulations.

Packaging: 25 and 100 kg fiber drums.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 3 years from production date for product in its original sealed package.

	COSMACOL® ETLP		COSMACOL® ECL
Sales specification			
Appearance @ 20° C	visual	white flakes	white flakes
Purity as ester	[wt. %]	90 min	90 min
Free alcohol	[wt. %]	10 max	10 max
Acid value	[mg KOH/g]	3.0 max	3.0 max
Water	[wt. %]	1.0 max	0.5 max
Melting point	[° C]	60–70	44–54
Additional properties			
Total aerobic microbial count	CFU/g	100 max	100 max
Total yeasts/moulds count	CFU/g	10 max	10 max

2. COSMACOL® specialties

COSMACOL® PSE

INCI name: Dimyristyl Tartrate; Cetearyl Alcohol; C12–15 Pareth-7; PPG-25-Laureth-25

COSMACOL PSE is a multi-purpose base for O/W emulsions containing emulsifier system, consistency factor and an emollient as well.

The product can be easily dispersed in water when melted at temperature higher than 50°C and allows to obtain formulations from fluid to creamy depending on the composition of the oil phase.

COSMACOL PSE can be used in combination with oils at different polarity and it is particularly suitable to get vanishing and easy spreading properties on final formulations.

Packaging: 25 kg fiber drum.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 2 years from production date for product in its original sealed package.



COSMACOL® PSE		
Sales specification		
Appearance @ 20° C	visual	white flakes
Drop point	[°C]	50–55
Hydroxyl number	[mg KOH/g]	175–195
Water	[wt. %]	1.0 max
pH (O/W emulsion based on 2.5 wt% of material)		5.0–6.5
Additional properties		
Total aerobic microbial count	CFU/g	100 max
Total yeasts/moulds count	CFU/g	10 max

COSMACOL® PLG

INCI name: Di-C12–13 Alkyl-Tartrate; Tri-C12–13 Alkyl Citrate; Silica

COSMACOL PLG is a base for water free clear gels that can be used with both vegetable and synthetic oils.

Lipogel based on this product can be prepared at room temperature by homogenisation of oily ingredients; mixture obtained can be further thickened by glycols or additional silica.

Packaging: 25 kg plastic drum.

Storage: protect from moisture and heating sources, keep below 30° C.

Shelf life: 3 years from production date for product in its original sealed package.



COSMACOL® PLG

Sales specification

Appearance @ 20° C	visual	clear liquid
Colour	[APHA]	50 max
Acid value	[mg KOH/g]	3.0 max
Water	[wt. %]	1.0 max

Additional properties

Density @ 20° C	[g/cm ³]	approx. 0.988
Viscosity @ 20° C	mPa*s	approx. 1009
Pour point	[°C]	approx. -36
Total aerobic microbial count	CFU/g	100 max
Total yeasts/moulds count	CFU/g	10 max

3. Analytical methods

	Sasol method	with reference to
APHA colour	RCM 3607	ASTM D 1209/05
Purity as ester	RCM 1111 / RCM 1201 (*)	Internal method
Free alcohol	RCM 1111 / RCM 1201 (*)	Internal method
Acid value	RCM 3817	ASTM D 664/04
Water	RCM 3804	ASTM E 203/01
Density @ 20° C	—	ASTM D 7042/04
Viscosity @ 20° C	—	ASTM D 7042/04
Melting point	RCM 3637	ASTM E 794/95
Pour point	RCM 3629	ASTM D 97/93
Flash point	RCM 3628	ASTM D 93/80
Refractive index @ 20° C	RCM 3619	ASTM D 1218/61
Total aerobic microbial count	—	Eu. Ph. 5.1.4
Total yeasts/moulds count	—	Eu. Ph. 5.1.4

(*) RCM 1111 is applied to COSMACOL® ELI, ESI, EOI and EBI while RCM 1201 is applied to COSMACOL® EMI, ETI, ECI, ETLP and ECL. Additional information are available upon request.

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