



products from renewable sources

COSMETICS AND PERSONAL CARE



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*Our products are derived from
renewable sources*

The raw materials used in our processes are biomass deriving primarily from the refining of vegetable oils for human nutrition.

ENHANCING YOUR NATURAL PORTFOLIO

Temix Oleo was formed in October 2014 by the merger of Oleochimica Italia (previously Undesa Italia) and Temix International. Given its roots, the new company is based in strong historical traditions and values, while offering extensive expertise in the respective industries of its predecessors: detergents and cosmetics (Temix international), and lubricants, rubber and other industrial application products (Oleochimica Italia).

Honoring Temix International's slogan "Enhancing your natural portfolio", **Temix Oleo** combines its experience in the distribution of raw materials, selected mainly from renewable sources, together with the technology and experience of Oleochimica Italia in esters and fatty acids production.



REAL SUSTAINABILITY

Now a well-known resource for specialty oleochemical esters, **Temix Oleo** focused on sustainable chemistry, promoting the use of selected renewable and biodegradable raw materials. Even internally, **Temix Oleo** promotes Eco-compatible business management practices, encouraging its team to continually seek innovative, sustainable and qualitative solutions.

RESEARCH AND DEVELOPMENT

With an ever-changing market, the ability to innovate is paramount. **Temix Oleo** continually invests in technological innovation, particularly through its Research and Development efforts.

CUSTOMIZED PRODUCTS

Temix Oleo has the ability to develop tailor-made products designed to meet each customer's needs. For more information on the technical details of this process, our sales office would be happy to help you.





EMOLLIENTS ENHANCING SMOOTHNESS


Emollients are products that have softening and smoothing properties. They promote general smoothing of the skin and diminish facial lines through plumping of individual corneocytes.

These effects may be simply due to the hydration imparted by the occlusive property of the emollients. They can also serve to lubricate the skin's surface and diminish the rough feeling associated with the dead cells of the outer skin layer.

Emollients come in many categories, ranging from water-soluble and oil-soluble to refatting agents. In selecting cosmetic products, present-day consumers gravitate towards those perceived as natural, along with those having lighter, non-greasy textures and additional conveniences like the two-in-one function, quick-drying, long lasting and effective performance.

EMOLLIENTS APPLICATION GUIDE

COMMERCIAL NAME	INCI	Sun care	Body care	Face care	Hair care	Make-up	Ap deo
TEMEST 2EHS	Ethylhexyl Stearate		***	*			
TEMEST 2EHP 	Ethylhexyl Palmitate		***	*			
TEMEST 2EHC	Ethylhexyl Cocoate		***		**		
TEMEST 2EHL	Ethylhexyl Laurate		***	*	*		*
TEMEST J110	Dioctyl Azelate	**			***	***	***
TEMEST J30	Diethylhexyl Sebacate	***	**		**	**	
TEMEST J05	Diethylhexyl Adipate	***		**	*	**	**
TEMEST 125 LT	C12-15 Alkyl Lactate	*		***	*		*
TEMEST 810 	Caprylic/Capric Triglyceride	***	**	*		**	
TEMEST GMO	Glyceryl Oleate		***	**	***		
TEMEST GMS V40	Glyceryl Stearate	**	**				
TEMEST Z110	Dioctyldodecyl Azelate	**		***		***	
TEMEST T20	Coco-Caprylate/Caprate	***		*			***
TEMEST ALB	C12-15 Alkyl Benzoate	***				***	**
TEMEST 99	Isononyl Isononanoate						***
TEMEST CTE	Cetearyl Ethylhexanoate	***	**	**	**	**	
TEMEST CTN	Cetearyl Isononanoate	**	*	**	**	**	**
TEMEST CTP	Cetyl Palmitate	*	**	**			
TEMEST IPP	Isopropyl Palmitate	*		**	**	**	**
TEMEST IPM	Isopropyl Myristate	**	**		**	**	**
TEMEST IPMP	Isopropyl Myristate and Isopropyl Palmitate	**	**		**	**	**
TEMEST DO	Decyl Oleate		**		**		
TEMEST PTIS	Pentaerythrithyl Tetraisostearate	***	**		**	***	

 Kosher certified product - Kosher certificate available upon request

EMOLLIENTS VARYING CHARACTERISTICS

The choice of an emollient or a blend of emollients depends on various characteristics:

- Chemical structure
- Polarity
- Spreading value
- Molecular weight
- Hydrolytic stability
- Rheological properties
- Solubilizing properties

POLARITY



The polar emollients, mostly triglycerides, esters and liquid waxes, avoid clogging the skin pores, thus allowing the skin to breathe. Non-polar emollients provide a good protective barrier for moisture retention. Polarity is also an important factor for the stabilization of W/O formulations.

SPREADING

The spreading values of emollients depend on their chemical structure, consistency and molecular weight. They provide information about the fatty characteristics of an emollient, which play an important role in assessing an emollient. Spreading values show how regularly an oil spreads on the irregular skin surface and how it penetrates and disappears from the skin surface.



EMOLLIENTS TYPICAL PRODUCT CHARACTERISTICS

COMMERCIAL NAME	INCI	Polarity	Spreading Value	Feeling on the skin
TEMEST 2EHS	Ethylhexyl Stearate	Medium	Medium	TEMEST 2EHS is a medium light feeling ester, it is a common ester for cosmetic formulation body care and skin care
TEMEST 2EHP 	Ethylhexyl Palmitate	Medium	Medium	TEMEST 2EHP is a medium light feeling ester, it is a common ester for cosmetic formulation body care and skin care
TEMEST 2EHC	Ethylhexyl Cocoate	Medium	Medium	TEMEST 2EHC is a medium light feeling ester, it is a common ester for cosmetic formulation body care and skin care
TEMEST 2EHL	Ethylhexyl Laurate	Medium	Medium	TEMEST 2EHL is a medium light feeling ester, it shows a good dispersing action for pigments
TEMEST J110	Dioctyl Azelate	High	Medium	Functional emollient with velvet sensation
TEMEST J30	Diethylhexyl Sebacate	High	Medium	Velvet sensation Excellent UV dispersion
TEMEST J05	Diethylhexyl Adipate	High	High	Non-oily silky touch
TEMEST 125 LT	C12-15 Alkyl Lactate	Medium	High	Non-oily silky touch, good properties for thickener toiletries and condition effect on hair. Thanks to presence of Lactic acid it shows a good moisturizing property
TEMEST 810 	Caprylic/Capric Triglyceride	Medium	Medium	TEMEST 810 is a common ester with rich skin feeling and excellent UV dispersion in articular for natural sun care application
TEMEST GMO	Glyceryl Oleate	Medium	Low	TEMEST GMO is a common ester with rich skin feeling and excellent ability to nourish skin
TEMEST GMS V40	Glyceryl Stearate	Medium	Low	TEMEST GMS is a common ester with rich skin feeling and excellent ability to nourish skin
TEMEST Z110	Dioctyldodecyl Azelate	High	Low	TEMEST Z110 imparts a soft and velvety texture to the skin. multipurpose emollients suitable for various cosmetic applications.
TEMEST T20	Coco-Caprylate/Caprate	Medium	High	TEMEST T20 is an ester with good slip properties, slightly fattening. It is a good replacement in skin care formulation
TEMEST ALB	C12-15 Alkyl Benzoate	High	High	TEMEST ALB is emollient excellent for Sun care application UV
TEMEST 99	Isononyl Isononanoate	High	High	TEMEST 99 is a very dry ester
TEMEST CTE	Cetearyl Ethylhexanoate	Medium	Medium	Non greasy light skin feeling
TEMEST CTN	Cetearyl Isononanoate	Medium	Medium	Dry skin feeling. No tacky, ester with highly hydrophobe
TEMEST CTP	Cetyl Palmitate	Medium	Medium	TEMEST IPP is an ester with low fatty character, high spreadability and good solubilizing properties
TEMEST IPP	Isopropyl Palmitate	Medium	High	High spreading and lubrication
TEMEST IPM	Isopropyl Myristate	Medium	High	TEMEST IPM is an ester with low fatty character, high spreadability and good solubilizing properties
TEMEST IPMP	Isopropyl Myristate and Isopropyl Palmitate	Medium	High	TEMEST IPMP is an ester with low fatty character, high spreadability and good solubilizing properties
TEMEST DO	Decyl Oleate	Medium	Medium	TEMEST DO is a dry emollient with good slip properties
TEMEST PTIS	Pentaerythrityl Tetraisostearate	High	Medium	TEMEST PTIS is an Excellent ester for Make Up formulation, for their protective action and rich feeling

OUR POLYBUTENES

Polybutene is a versatile cosmetic emollient ideal for a wide range of personal care products. It is available in both low and high viscosity grades that are easily blended. Polybutene is ideal for use in color cosmetics and lip products to help provide skin with a soft feeling, while adding waterproofing capability and moisturizing effects.

Polybutene is an effective waterproofing agent for sunscreen formulations. Skin texture improves significantly within minutes after application of formulations containing polybutene, showing a clear contrast and fine texture. With its long-lasting effects, it helps to retain skin moisture content and thus improve skin tone and texture. As an affordable alternative to higher-priced esters, polybutene provides the soft feeling that today's cosmetic formulations demand.

CONSISTENCY AGENTS AND THICKENERS

Consistency agents are substances that provide creams with density, increase stability and improve suspension of added ingredients. Thickeners enhance the consistency and viscosity of cosmetic products and also improve stability and performance on the skin. Therefore, selection of the correct thickener can impact desired performance.

Ester-based thickeners may have emulsifying or gelling properties as well; due to their biocompatibility, can also improve stability and performance on the skin.



POLYBUTENES

Classification	Molecular Weight	Viscosity Cst @ 100°C	Color (Apha)	Water	Acid value
PBT 25H	750	48	Max 15	30 ppm	0,01
PBT 10H	950	220	Max 15	30 ppm	0,01
PBT 30H	1300	645	Max 15	30 ppm	0,01
PBT 210H	2400	4700	Max 15	30 ppm	0,01

CONSISTENCY AGENTS AND THICKENERS

COMMERCIAL NAME	INCI	Melting point	Hlb	Main properties
ALCOLTEX 1498 F&B	Myristyl Alcohol	35-38°C		Used in emulsion to increase viscosity and impart a dry non-greasy feeling
ALCOLTEX 1698 F&B	Cetyl Alcohol	47-50°C		Fatty Alcohol. Acts as consistency factor O/W co-emulsifier
ALCOLTEX 1618 F&B (30:70)	Cetearyl Alcohol	50-54°C		Fatty Alcohol. Acts as consistency factor O/W co-emulsifier
ALCOLTEX 1618 F&B (50:50)	Cetearyl Alcohol	48-53°C		Fatty Alcohol. Acts as consistency factor O/W co-emulsifier

ALCOLTEX 1618 F&B (70:30)	Cetearyl Alcohol	47-52°C		Fatty Alcohol. Acts as consistency factor O/W co-emulsifier
ALCOLTEX 1898 F&B	Stearyl Alcohol	56-60°C		Fatty Alcohol. Acts as consistency factor O/W co-emulsifier

TEMEST CTP	Cetyl Palmitate	54°C		Increase viscosity, impart a dry feeling and results in dense white emulsion used to build structure in cosmetic stick
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TEMEST GMS V40	Glyceryl Stearate	57°C	3,4	Used in cosmetic O/W emulsion for the viscosity adjustment; Acts as a consistency giving agents
TEMEST GMS ST	Glyceryl Stearate and Sodium Stearate	57°C	3,4	Acts as an emulsifier
TEMEST EGDS	Glycol Distearate	62°C	1,5	Acts as pearling agent

EMULSIFIERS MAKE EASIER YOUR FORMULATIONS

Emulsifiers are the most common type of delivery system used in cosmetics. They enable a wide variety of ingredients to be delivered quickly to skin and hair.

Water plays two main roles in cosmetic formulation:

- **Solvent and vehicle for hydro-soluble active ingredients**
- **Fresh feeling due to evaporation**

The best-known cosmetic products are based on emulsion. In these emulsions, small droplets of oil are dispersed in water (O/W) or small droplets of water are dispersed in oil (W/O).

Since oil and water are incompatible, emulsifiers were added to produce the small droplets and to prevent the oil and water phase from separating.

Depending on the nature of the alcohol used in the esterification process, they may be predominantly hydrophobic or hydrophilic, and thus suitable as W/O or O/W respectively.

Non-ionic emulsifiers are not affected by water hardness or pH levels.



HAIR CARE

COMMERCIAL NAME	INCI	Applications
ETOWAX HCS	Cetearyl alcohol, PEG-40 hydrogenated castor oil, Behentrimonium Chloride, Stearalkonium Chloride	Conditioning base for hair care: ideal for balm and hair mask formulations
ETOWAX PO	Laureth-3 phosphate, Cetearyl Alcohol, laureth-3, Lauryl Myristyl Alcohol	Effective emulsifier for peroxide emulsions stable in a wide range of pH
ETOWAX AB	Cetearyl Alcohol, Sodium Cetearyl Sulfate, Sodium Lauryl Sulfate	Emulsifier for hair balms and creams
ETOWAX AB/W	Cetearyl Alcohol, Sodium Lauryl Sulfate	Emulsifier for hair balms and creams
ETOWAX AB/N	Cetearyl Alcohol, Sodium Cetearyl Sulfate	Emulsifier for hair balms and creams
ETOWAX NB	Cetearyl alcohol, Ceteareth-20	Emulsifier for skin care and hair care
ETOWAX NB10	Cetearyl alcohol, Ceteareth-25	Emulsifier for skin care and hair care
ETOWAX NB30	Cetearyl alcohol, Ceteareth-30	Emulsifier for skin care and hair care
ETOMIX HC20	Ceteareth-20	Emulsifier for skin care and hair care
ETOMIX HC25	Ceteareth-25	Emulsifier for skin care and hair care
ETOMIX GLY 26	Glycereth-26	Emulsifier for skin care and hair care

SKIN CARE

COMMERCIAL NAME	INCI	Applications
ETOWAX SP	Glyceryl Stearate, Ceteareth-20, Ceteareth-12, Cetearyl Alcohol, Cetyl Palmitate	Self emulsifier for O/W emulsions: stable in a wide range of pH
ETOWAX EB	Cetearyl Alcohol, Ceteareth-25, Polysorbate 60, PEG-100 Stearate	Self emulsifier for O/W emulsions: stable in a wide range of pH
ETOWAX GMPG	Glyceryl Stearate, PEG-100 Stearate	Emulsifier for skin care: it gives more consistency to the emulsions
ETOWAX EB2	Cetearyl Alcohol, PEG-20 Stearate	Self emulsifier for O/W emulsions: stable in a wide range of pH
TEMEST GMS V40	Glyceryl Stearate	Co-emulsifier and emollient
TEMEST GMS ST	Glyceryl Stearate, Sodium Stearate	Self emulsifier for skin and hair care
ETOWAX OLY	Cetearyl glucoside, Sorbitan Stearate, Glyceryl Stearate, Cetearyl Alcohol	Self emulsifier for O/W emulsions: stable in a wide range of pH



OUR HAIR AND BODY CARE SOLUTIONS

According to our philosophy, we offer surfactants based on renewable sources and a wide range of traditional surfactants, which completes the portfolio and allows us to satisfy each customer's request.

SURFACTANTS AND HYDROPHILIC ESTERS

COMMERCIAL NAME	INCI	Applications
HYDROPHILIC ESTERS		
TEMEST HE	PEG-7 Glyceryl Cocoate	Hydrophilic ester
TEMEST CC6	PEG-6 Caprylic/capric glycerides	Hydrophilic ester

ANIONIC SURFACTANTS		
TEMCARE LS	Sodium Lauroyl Sarcosinate	Primary surfactant for mild formulation
AMITEX DEA	Cocamide DEA	Secondary mild surfactant for personal care application
TEMIXAN 270	Sodium Laureth Sulfate	Primary mild surfactant for personal care application
TEMCARE S3	Disodium Laureth Sulfosuccinate	Secondary mild surfactant for personal care application





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