





**Phoenix Chemical, Inc.** was founded in 1982 with a corporate charter to develop proprietary and unique chemical technology and products for the cosmetic, personal care and OTC pharmaceutical industries.

We are a high-technology industry and customer-oriented company dedicated to product and market development. **Phoenix Chemical Inc.** has grown into a multinational organization with agents worldwide, allowing the company to serve customers internationally.

In January 2017, **Phoenix Chemical, Inc.** relocated its Corporate Research & Development Center to Branchburg, New Jersey. This relocation enabled Phoenix to expand of its offices, organic synthesis, process development, application, analytical and polymer laboratories. The move also encompasses the construction of a kilo laboratory, in-house manufacturing and greatly expanded warehousing capability. Our thrust continues to remain the development unique, innovative and performance driven chemistry.

# Table of Contents

## **PELEMOL® & BIOGELS®**

### *Esters / Emollients*

100% Vegetable Derived .....	4-5
Synthetic .....	6-7

## **PECOSIL®**

### *Organofunctional Silicones*

Silicone Phosphates .....	8
Silicone Quaternaries & Panthenol Co-Polymers .....	8
Silicone Gels .....	8-9
Silicone Esters and Pigment Coatings .....	9
Silicone Fluids .....	9
Flouro Silicone Fluids .....	10
Organofunctional Silicones .....	10

## **PHOENOMULSE®**

### *Emulsions & Emulsion Aids*

Emulsions & Foam Burst Technology .....	11
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## **PECOGEL®**

### *Polymeric Cosmetic Hydrogels*

Nonionic Polymers .....	11
Nonionic Silicone Based Polymers .....	11

## **GIOVAREZ® & PECOREZ®**

Polymers .....	12
----------------	----

## **CATEMOL®**

Amidoamines .....	12
Quaternaries & Cationic Organic Salts .....	12

## **PHOENAMID® & PHOENAMIDE®**

Amidoamines .....	13
-------------------	----

## **NEOPRO®**

Proteins & Protein Derivatives .....	13
--------------------------------------	----

## **PHOENOXOL®**

Alkoxyated Alcohols .....	13
---------------------------	----

## **PHOENOXIDE®**

Alkoxyated Acids .....	14
------------------------	----

## **PHOENATE®**

PEG Esters .....	14
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# PELEMOL® & BIOGEL® 100% Vegetable Derived Esters

**Innovative. Sustainable. Vegetable Derived.** These products can directly replace and improve upon petroleum based ingredients and provide cosmetics with a real functional edge in the marketplace.

<b>Product</b>	<b>INCI Name</b>	<b>Description</b>
<b>Pelemol 3G22</b>	Polyglyceryl-3 Behenate	<i>Improves rinse off in cleansers. Imparts friction to creams &amp; lotions.</i>
<b>Pelemol 6GPR</b>	Polyglyceryl-6 Polyricinoleate	<i>Pigment wetting and grinding aid for lipsticks.</i>
<b>Pelemol 10GHO</b>	Polyglyceryl- Hexaoleate	<i>Contributes to shine and water resistance in leave-on-conditioners.</i>
<b>Pelemol BB</b>	Behenyl Behenate	<i>Builds viscosity, imparts richness and adds emolliency.</i>
<b>Pelemol BE</b>	Behenyl Erucate	<i>Builds viscosity, imparts richness and adds emolliency.</i>
<b>Pelemol CCC</b>	Coco-Caprylate/Caprate	<i>Leaves skin with soft, luxurious, slightly waxy feel.</i>
<b>Pelemol CP</b>	Cetyl Palmitate	<i>Emollient, thickener for creams, lotions and lipsticks.</i>
<b>Pelemol CCT</b>	Caprylic/Capric Triglyceride	<i>Light viscosity resulting in a smooth, silky emollient feel to skin.</i>
<b>Pelemol CR</b>	Cetyl Ricinoleate	<i>Very lubricious, melts at skin temperature.</i>
<b>Pelemol D3GP</b>	Dimerdilinoyleyl Dinlinoleate & Propanediol Dicaprylate/Caprate & Polyglyceryl-3 Behenate	<i>Functional equivalent to animal based cholesteryl/ lanosteryl esters used in lipstick.</i>
<b>Pelemol D5R-V</b>	Propandiol Dicaprylate/Caprate & Diisostearyl Malate	<i>Replacement for Cyclomethicone D5. Identical flow, spreadability, softness and cushion on rub-in.</i>
<b>Pelemol DD</b>	Dimer Dilinoleyl Dimer Dilinoleate	<i>Tasteless, odorless and glossy polyester. Excellent for lipsticks.</i>
<b>Pelemol DISD</b>	Diisostearyl Dimer Dilinoleate	<i>Exhibits considerable playtime. Useful in color cosmetics.</i>
<b>Pelemol DO</b>	Decyl Oleate	<i>Leaves a cushion &amp; light waxy residue to leave skin soft &amp; supple.</i>
<b>Pelemol DP-144B</b>	Dipentaerythrityl Tetrabeheante/ Polyhydroxystearic Acid	<i>Holds 3 times its weight in water. Superior lipstick ester.</i>
<b>Pelemol EA</b>	Ethyl Arganate	<i>Extremely dry ester and exhibits spreadability &amp; wetting on skin.</i>
<b>Pelemol EC</b>	Ethyl Canolate	<i>Exhibits a distinct silicone-like feel on skin and much like cyclomethicone D5 and low viscosity silicone fluids.</i>
<b>Pelemol EE</b>	Octyldodecyl Erucate	<i>Dry ester. Very emollient.</i>
<b>Pelemol GMB</b>	Glyceryl Behenate	<i>Emulsifier for creams &amp; lotions. Imparts richness, builds viscosity.</i>
<b>Pelemol GLMA</b>	Glyceryl Laurate	<i>Functions as a conditioner and emulsifying agent.</i>
<b>Pelemol GMR</b>	Glyceryl Ricinoleate	<i>Functions as an emollient, conditioner and emulsifying agent.</i>
<b>Pelemol GTB</b>	Tribehenin	<i>Used in oil phase of creams &amp; lotions. Adds richness &amp; emolliency.</i>
<b>Pelemol GTHS</b>	Trihydroxystearin	<i>Hydrogenated castor oil with no odor or taste.</i>
<b>Pelemol GTIS</b>	Triisostearin	<i>Lubricious, emollient. Good cushion, substantive to the skin.</i>
<b>Pelemol II</b>	Isostearyl Isostearate	<i>Provides shine, spreadability and emolliency to the skin.</i>
<b>Pelemol ISAO</b>	Isostearyl Argan Glycerides	<i>Imparts an elegant texture to skin, non-greasy.</i>
<b>Pelemol ISB</b>	Isostearyl Behenate	<i>Extremely emollient. Melts at skin temperature.</i>
<b>Pelemol ISHS</b>	Isostearyl Hydroxystearate	<i>Mildly occlusive emollient. Glossy. Melts at body temperature.</i>
<b>Pelemol JEC</b>	Triisostearin (and) Glyceryl Behenate	<i>Lubricious soft paste.</i>
<b>Pelemol MM</b>	Myristyl Myristate	<i>Very lubricious emollient, soft wax like ester effectively used to build creaminess and viscosity.</i>
<b>Pelemol MOR-1</b>	Dilinoic Acid/Propanediol Copolymer (and) Propanediol Dicaprylate/Dicaprate	<i>Ester blend to mimic solubility, viscosity and sensory properties of mineral oils.</i>
<b>Pelemol MOR-3</b>	Dilinoic Acid/Propanediol Copolymer (and) Propanediol Dicaprylate/Dicaprate	<i>Ester blend to mimic solubility, viscosity and sensory properties of mineral oils.</i>

# PELEMOL® & BIOGEL® 100% Vegetable Derived Esters

<b>Product</b>	<b>INCI Name</b>	<b>Description</b>
<b>Pelemol MOR-4</b>	Coco-Caprylate/Caprata (and) Dimer Dilinoleyl Dimer Dilinoleate	<i>Ester blend to mimic solubility, viscosity and sensory properties of mineral oils.</i>
<b>Pelemol MOR-5</b>	Coco-Caprylate/Caprata (and) Dimer Dilinoleyl Dimer Dilinoleate	<i>Ester blend to mimic solubility, viscosity and sensory properties of mineral oils.</i>
<b>Pelemol OE</b>	Oleyl Erucate	<i>Joboba oil substitute. Light emollient having good dry down &amp; spreadability.</i>
<b>Pelemol OL</b>	Oleyl Lactate	<i>Alpha-hydroxy acid ester. Leaves skin soft and supple on rub-in.</i>
<b>Pelemol P3D</b>	Dilinoleic Acid/Propanediol Copolymer	<i>Slightly tacky, substantive, glossy and has no taste or odor. Ideal lipsticks and lip balms.</i>
<b>Pelemol P-99</b>	Propanediol Dipelargonate	<i>Water white dry emollient ester. Used as extraction solvent.</i>
<b>Pelemol P-810</b>	Propanediol Dicaprylate/Caprata	<i>Extremely dry ester. Odorless, colorless. Replacement for many synthetically derived esters.</i>
<b>Pelemol P-1263</b>	Polyglyceryl-10 Hexaoleate & Polyglyceryl-6 Polyricinoleate	<i>Polymeric water-in-oil emulsifier for creams and lotions.</i>
<b>Pelemol PHS-8</b>	Polyhydroxystearic Acid	<i>Liquid polyester. Substantive, glossy and moisturizing to skin.</i>
<b>Pelemol SB</b>	Stearyl Behenate	<i>Useful in the oil phase of creams and lotions to impart stability, build viscosity, impart richness.</i>
<b>Pelemol SnO</b>	Stearyl Caprylate	<i>Crystalline solid. Extremely broad solubility range. Occlusive.</i>
<b>Pelemol SR-100</b>	Coco-Caprylate/Caprata (and) Dimer Dilinoleyl Dimer Dilinoleate	<i>Ester replacement for silicone fluids with improved stability and higher refractive index.</i>
<b>Pelemol SR-350</b>	Coco-Caprylate/Caprata (and) Dimer Dilinoleyl Dimer Dilinoleate	<i>Ester replacement for silicone fluids with improved stability and higher refractive index.</i>
<b>Pelemol SR-1000</b>	Coco-Caprylate/Caprata (and) Dimer Dilinoleyl Dimer Dilinoleate	<i>Ester replacement for silicone fluids with improved stability and higher refractive index.</i>
<b>Pelemol SS</b>	Stearyl Stearate	<i>Oil soluble flake, provides richness while building viscosity</i>
<b>Pelemol T-91854</b>	Triisostearyl Trilinoleate	<i>Dark, amber, viscous liquid. Strong properties as a pigment dispersant.</i>
<b>Pelemol TEC</b>	Triethyl Citrate	<i>Silicone-like silkiness feel on the skin. Rubs in to dryness.</i>
<b>Pelemol TISC</b>	Triisostearyl Citrate	<i>Has a degree of hydrophobicity facilitating emulsification and wettability.</i>
<b>Pelemol VL</b>	Dimer Dilinoleyl Dimer Dilinoleate and Triisostearin	<i>Replacement to lanolin oil. Tactile and solubility properties make it suitable as a lanolin replacement.</i>
<b>BIOGEL Argan Butter</b>	Hydrogenated Argania Spinosa Kernel Oil	<i>Delivers intense moisturization. Quick absorption and exquisite feel.</i>
<b>BIOGEL Canola Butter</b>	Hydrogenated Canola Butter	<i>Used as a diluent in soap bars. Ideal emollient for skin conditioning.</i>
<b>BIOGEL Canola Butter/FH</b>	Hydrogenated Canola Oil	<i>White flake. Used as a diluent in soap bars.</i>
<b>BIOGEL Castor/FH</b>	Hydrogenated Castor Oil	<i>Fully hydrogenated flakes.</i>
<b>BIOGEL Moringa Butter</b>	Hydrogenated Moringa Oleifera Seed Oil	<i>Known for its high oxidative stability. Exhibits antibacterial activity.</i>
<b>BIOGEL Olive Butter</b>	Hydrogenated Olive Oil	<i>Excellent spreadability on the skin. Ideal as a massage butter.</i>
<b>BIOGEL VLHS</b>	Dimerdilinoyleyl Dimer Dilinoleate (and) Triisostearin (and) Hydroxystearic Acid	<i>Spreads easily on skin resulting in a glossy emollient non-tacky coating.</i>

# PELEMOL<sup>®</sup> Synthetic

Multifunctional properties include pigment wetting, gloss, emolliency, superior cushion, lubricious substantivity, spreadability and moisturization.

<b>Product</b>	<b>INCI Name</b>	<b>Description</b>
<b>Pelemol 89</b>	Ethylhexyl Isononanoate	<i>Very dry emollient. Rubs in to dryness on skin.</i>
<b>Pelemol 108</b>	Isodecyl Ethylhexanoate	<i>Dry, highly branched ester. Resin plasticizer for skin and hair.</i>
<b>Pelemol 168</b>	Cetyl Ethylhexanoate	<i>Very light ester, imparts velvety silky feel to skin.</i>
<b>Pelemol 187</b>	Stearyl Heptanoate	<i>Low melt ester. Provides an emollient cooling effect to skin.</i>
<b>Pelemol 256</b>	C12-15 Alkyl Benzoate	<i>Good wetting agent and solvent.</i>
<b>Pelemol 899</b>	Isononyl Isononanoate (and) Ethylhexyl Isononanoate	<i>Low viscosity ester. Dry feel and light cushion. Reduces tack and improves spreadability.</i>
<b>Pelemol 2014</b>	Octyldodecyl Myristate	<i>Tasteless, odorless and extremely emollient.</i>
<b>Pelemol 2022</b>	Octyldodecyl Behenate	<i>Its silkiness makes it ideal for all color cosmetics.</i>
<b>Pelemol BIP-PC</b>	Butylphthalimide (and) Isopropylphthalamide	<i>Solvent for avobenzone and oxybenzone. Also functions as a plasticizer for nail lacquers.</i>
<b>Pelemol C25EH</b>	C12-15 Alkyl Ethylhexanoate	<i>Very light, dry ester. Useful for spray fragrances, after shaves.</i>
<b>Pelemol CA</b>	Cetyl Acetate	<i>Very light ester. Ideal for skin preparations.</i>
<b>Pelemol CL</b>	Cetyl Lactate	<i>Provides slip to tacky polymers.</i>
<b>Pelemol D-2000</b>	PPG-26 Dimer Dilinoleate Copolymer	<i>Extremely substantive to skin. Ideal for very transfer resistant products.</i>
<b>Pelemol D5R-1</b>	Ethylhexyl Isononanoate (and) Cetyl Dimethicone	<i>Mimics sensory properties of D5. Has similar solubility characteristics.</i>
<b>Pelemol D-899</b>	PPG-26 Dimer Dilinoleate Copolymer (and) Isononyl Isononanoate (and) Ethylhexyl	<i>Very substantive without the tack, extremely glossy, exhibits outstanding cushion.</i>
<b>Pelemol DIA</b>	Diisopropyl Adipate	<i>Dry, synthetically derived, water white.</i>
<b>Pelemol DIPS</b>	Diisopropyl Sebacate	<i>Hydrophobic, clear, odorless, low viscosity ester.</i>
<b>Pelemol DISA</b>	Diisopropyl Adipate	<i>Oil soluble, light and emollient</i>
<b>Pelemol DISM</b>	Diisostearyl Malate	<i>Light silky emolliency, substantive to the skin, odorless.</i>
<b>Pelemol DP-72</b>	Dipentaerythryl Tetrahydroxystearate/ Isostearate	<i>Hydrophobic, extremely substantive. Produces glossy lustrous films. Excellent lanolin substitute.</i>
<b>Pelemol G7A</b>	Glycereth-7 Triacetate	<i>Water soluble emollient. Good solvent for esters. Functions as a co-solvent or coupler agent.</i>
<b>Pelemol G7B</b>	Glycereth-7 Benzoate	<i>Blooms heavily in water. Ideal for bath products. Soluble in anionic detergents adding emolliency.</i>
<b>Pelemol G45L</b>	Glycereth-5 Lactate	<i>Coupler for hydro-alcoholic fragrance systems allowing inclusion of water while maintaining clarity.</i>
<b>Pelemol GTAR</b>	Glyceryl Triacetyl Ricinoleate	<i>Highly lubricious, excellent pigment wetting ester. High shine.</i>
<b>Pelemol GTO</b>	Triethylhexanoin	<i>Light, very emollient non tacky ester with light cushion.</i>
<b>Pelemol HCO</b>	Hydrogenated Castor Oil	<i>Used in applications as thickener, pacifier and structurant in stick products.</i>
<b>Pelemol ICB</b>	Isocetyl Behenate	<i>Medium to dry, very emollient ester. Odorless, tasteless.</i>
<b>Pelemol ICO</b>	Isocetyl Ethylhexanoate	<i>Dry emollient ester.</i>
<b>Pelemol ICIS</b>	Isocetyl Isostearate	<i>Dry emollient ester.</i>
<b>Pelemol ICS</b>	Isocetyl Stearate	<i>Lubricious, non-greasy emollient ester. Pigment dispersant.</i>
<b>Pelemol IDO</b>	Isodecyl Oleate	<i>Medium viscosity ester. Imparts sheen to hair.</i>

# PELEMOL<sup>®</sup> Synthetic

<b>Product</b>	<b>INCI Name</b>	<b>Description</b>
<b>Pelemol IN-2</b>	Isononyl Isononanoate	<i>Dry, non-oily, emollient with excellent spreadability.</i>
<b>Pelemol IPIS</b>	Isopropyl Isostearate	<i>Light, almost waxy feel on rub-in and is highly suited for use in massage oils.</i>
<b>Pelemol IPM</b>	Isopropyl Myristate	<i>Colorless, odorless. Ideal for hair preparations and sunscreens.</i>
<b>Pelemol ISHS</b>	Isostearyl Hydroxystearate	<i>Mildly occlusive. Melts at body temperature. Good gloss.</i>
<b>Pelemol ISNP</b>	Isostearyl Neopentanoate	<i>Dry to semi-dry ester. Imparts pleasantly silky feel to skin.</i>
<b>Pelemol I-1816</b>	Isostearyl Palmitate	<i>Excellent aesthetic properties. Produces non-greasy tack free films. Promotes slip with silky after feel.</i>
<b>Pelemol MAR</b>	Methyl Acetyl Ricinoleate	<i>Useful as a light-feel moisture barrier. Low viscosity.</i>
<b>Pelemol ML</b>	Myristyl Lactate	<i>Non-oily, soft waxy, emollient. Low melt point. Velvety feel.</i>
<b>Pelemol NGDIS</b>	Neopentyl Glycol Diisostearate	
<b>Pelemol NPGDD</b>	Neopentylglycol/Dicaprate/ Dicaprylate	<i>Water white, odorless, low viscosity, dry liquid that leaves the skin with a soft after feel with a matte finish.</i>
<b>Pelemol NGDO</b>	Octyldodecyl Ricinoleate	<i>Light emollient ester/solvent. Used as solubilizer and plasticizer for nail enamels.</i>
<b>Pelemol OPG</b>	Ethylhexyl Pelargonate	<i>Very dry emollient. Reduces tackiness in antiperspirant sticks.</i>
<b>Pelemol P-49</b>	Pentaerythrityl Tetraisononanoate	<i>Extremely silky ester, tasteless, odorless, glossy.</i>
<b>Pelemol PTIS</b>	Pentaerythrityl Tetraisostearate	<i>Rapidly absorbed ester. Possesses cushion with slight drag. Extremely bland taste.</i>
<b>Pelemol PTL</b>	Pentaerythrityl Tetralaurate	<i>Soft paste, very hydrophobic, lubricious, substantive to skin.</i>
<b>Pelemol PTO</b>	Pentaerythrityl Tetraethylhexanoate	<i>Clear, silky. Is oil soluble and water insoluble.</i>
<b>Pelemol SPO</b>	Cetearyl Ethylhexanoate	<i>Very emollient, has a broad solubility, leaves skin luxurious.</i>
<b>Pelemol TDE</b>	Tridecyl Erucate	<i>Very light oily feel. Replacement for mineral oil.</i>
<b>Pelemol TGC</b>	Trioctyldodecyl Citrate	<i>Viscous, excellent cushion, pigment wetting &amp; dispersant.</i>
<b>Pelemol TMPIS</b>	Trimethylpropane Triisostearate	<i>Extremely emollient with superior cushion. Modifier for plasticity/melt point of high melt esters.</i>
<b>Pelemol TMPO</b>	Trimethylpropane Triethylhexanoate	<i>Medium to light emollient with exceptional playtime. Hydrophobic &amp; non-tacky.</i>

## PECOSIL<sup>®</sup> Silicone Phosphates

Product	INCI Name	Description
<b>Pecosil PS-100</b>	Dimethicone PEG-7 Phosphate	Anionic primary o/w emulsifier. Provides manageability and sheen to hair
<b>Pecosil PS-100K</b>	Potassium Dimethicone PEG-7 Phosphate	Potassium salt of PS-100 with more cushion. Primary o/w emulsifier.
<b>Pecosil PS-112</b>	Dimethicone PEG-7 Phosphate	High molecular polymeric analog of PS-100. Contains 12 ionizable phosphate groups.
<b>Pecosil F-112</b>	Perflouorononyl ethyl Carboxydecyl Dimethicone PEG-7 Phosphate	Water soluble oleophobic flourosilicone fluid. Exhibits foaming in water. Useful in shampoos.
<b>Pecosil PS-11220</b>	Dimethicone PEG-20 Phosphate	High molecular weight analog to PS-112. Has 20 Ionizable phosphates.
<b>Pecosil WDS-124</b>	Dimethicone PEG/PPG-12/4 Phosphate	Anionic, can complex with cationic sites on conditioned hair for enhanced sheen. Pigment wetter and dispersant.

## PECOSIL<sup>®</sup> Silicone Quaternaries & Panthenol Copolymers

Product	INCI Name	Description
<b>Pecosil 36PS</b>	Dilinoleamidopropyl Dimethylamine Dimethicone PEG-7 Phosphate	Functions as an emulsifier for high molecular weight silicone fluids in shampoos.
<b>Pecosil PAN-12</b>	Potassium Dimethicone PEG-7 Panthenyl Phosphate	Provides sheen, manageability, and softness, and also serves to ease both wet- and dry-combing.
<b>Pecosil PAN-12180</b>	Stearidimonium Hydroxypropyl Panthenyl PEG-7 Dimethicone Phosphate Chloride	Reduces combing forces for both wet and dry hair as well as forming a glossy, light reflective film for added shine. Adds volume to hair.
<b>Pecosil PAN-400</b>	Potassium Dimethicone PEG-7 Panthenyl Phosphate	Suitable for anhydrous systems such as lipsticks, nail treatment and hot oil treatments.
<b>Pecosil PAN-418</b>	Stearidimonium Hydroxypropyl Panthenyl PEG-7 Dimethicone Phosphate Chloride	Tetra-panthenol, tetra-quaternary silicone that provides enhanced substantivity, body and sheen to the hair.
<b>Pecosil PSQ-1218</b>	Stearidimonium Hydroxypropyl PEG-7 Dimethicone Phosphate Chloride	Provides manageability and superior comb thru properties. Has a strong affinity to hair and skin. Contains 12 phosphate groups.
<b>Pecosil PSQ-418</b>	Stearidimonium Hydroxypropyl PEG-7 Dimethicone Phosphate Chloride	Has a strong affinity to hair and skin. Superb conditioning to hair and skin. Superior comb thru properties.
<b>Pecosil SPP-50</b>	Potassium Dimethicone PEG-7 Panthenyl Phosphate	Provides hydration, conditioning and improved wet/dry-comb characteristics to hair.

## PECOSIL<sup>®</sup> Silicone Gels

Series of gels to deliver a luxurious satin feel and impart a pronounced silky, powdery, satin elegance to the skin. Effective as a lubricant to improve mold release for deodorant sticks, lipsticks and soap bars.

Product	INCI Name	Description
<b>Pecosil G</b>	Dimethicone (and) Cyclomethicone (and) Phenyl Trimethicone (and) Trimethylsiloxysilicate	Clear silicone gel, extraordinary lubricious properties. Tack free, leaves skin satiny, soft.
<b>Pecosil G-5</b>	Dimethicone (and) Phenyl Methicone (and) Poly(C30-45) Olefin	Clear silicone gel, extraordinary lubricious properties. Tack free, leaves skin satiny, soft.
<b>Pecosil G-10</b>	Dimethicone (and) Isododecane (and) Trimethylsiloxysilicate (and) Ethylhexyl Hydroxystearate and Poly(C30-45) Olefin	Imparts unique silky, lubricious feel to skin. It's film forming properties make it very suitable for use in massage products.



## PECOSIL<sup>®</sup> Silicone Gels

Product	INCI Name	Description
<b>Pecosil G-62BD</b>	Cyclopentasiloxane (and) Dimethicone/ Vinyl Dimethicone Crosspolymer (and) Behenyl Dimethicone/Bis Vinyl dimethicone Crosspolymer	<i>Provides luxurious emolliency, spreadability, and cushion to all skin products. Leaves the skin with a pronounced silky, powdery, light waxy elegance.</i>
<b>Pecosil G-600</b>	Isododecane (and) Vinyl Dimethicone/ Lauryl Dimethicone Crosspolymer (and) Dimethicone (and) Lauryl Dimethicone	<i>Leaves the skin with a pronounced silky, powdery, light waxy elegance. Acts as a moisture barrier that contributes to softness in all make-up, skin and sunscreen products.</i>

## PECOSIL<sup>®</sup> Silicon Esters and Pigment Coatings

Hydrophobic and occlusive humectants desirable in skin and make-up formulations.

Product	INCI Name	Description
<b>Pecosil D3B</b>	Hydroxypropyl Dimethicone Behenate	<i>Provides occlusive barrier on skin to prevent moisture loss. Matte finish for color and promotes transfer resistance.</i>
<b>Pecosil DB</b>	Dimethiconal Behenate	<i>Extremely lubricious and emollient silicone ester.</i>
<b>Pecosil DCL</b>	Dimethicone PEG-7 Lactate	<i>Water soluble, alpha-hydroxy silicone ester. Ideal for bath products.</i>
<b>Pecosil DCU</b>	Dimethicone PEG-7 Undecylenate	<i>Soluble in water and castor oil. Very useful in lipsticks as a coupling agent.</i>
<b>Pecosil C8ES</b>	Octyltriethoxy Silane	<i>Reactive to pigments, providing an alkylsilicone hydrophobic coating. Improves pigment dispersibility in organic media.</i>
<b>Pecosil SH-25L</b>	Dimethicone/Methicone Copolymer	<i>Reactive silicone that will bond to pigment surfaces resulting in a covalently bound hydrophobic silicone coating.</i>

## PECOSIL<sup>®</sup> Silicone Fluids

This hydrophobic polydimethylsiloxane wax based series leaves the hair with a shiny, glistening barrier to the hair.

Product	INCI Name	Description
<b>Pecosil ARS-09</b>	Phenyl Isopropyl Dimethicone	<i>Hydrophobic silicone wax. Eliminates syneresis, as lubricants improve mold release for lipstick and soap bars, bonding agents for hot pour or pressed powder and applications where "slip" is desirable, imparting barrier properties to enhance moisturization.</i>
<b>Pecosil ARS-12</b>	Lauryl Phenyl Isopropyl Dimethicone	<i>Liquid hydrophobic silicone wax. Improves mold release.</i>
<b>Pecosil AS-16</b>	Cetyl Dimethicone	<i>Liquid hydrophobic silicone wax. Improves mold release.</i>
<b>Pecosil AS-18</b>	Stearyl Dimethicone	<i>Liquid paste hydrophobic silicone wax. Improves mold release.</i>
<b>Pecosil AS-22</b>	Behenyl Dimethicone	<i>Gel hydrophobic silicone wax. Imparts mold release.</i>
<b>Pecosil AS-26</b>	Ceretyl Dimethicone	<i>Soft hydrophobic silicone wax. Imparts mold release.</i>
<b>Pecosil DCF-12</b>	PEG-12 Dimethicone	<i>Polymeric dimethicone copolyol fluid. Functions as a wetting agent, emulsifier &amp; foam builder.</i>
<b>Pecosil DCF-1818</b>	PEG/PPG-18/18 Dimethicone	<i>Emulsifier, wetting agent for hair conditioners.</i>
<b>Pecosil FST-412</b>	Perflourononyl ethyl Carboxydecyl Lauryl Dimethicone	<i>Hydrophobic and oleophobic flourosilicone wax.</i>
<b>Pecosil S0-9</b>	PEG-9 Dimethicone/PEG-9 Olive Phosphate	<i>Water soluble moisturizing and conditioning emollient system.</i>

## PECOSIL<sup>®</sup> Flouro Silicone Fluids

<b>Product</b>	<b>INCI Name</b>	<b>Description</b>
<b>Pecosil FDM-30</b>	Perflourononylethyl Carboxydecyl PEG-10 Dimethicone	<i>Water soluble flourosilicone fluid.</i>
<b>Pecosil FSH-150</b>	Perflourononyl Dimethicone	<i>Preferably used in sunscreens for sweat proof products (oil repellency), shampoos and conditioners for sebum control and quick drying. Excellent anti-frizz agents. Promotes lustrous light hair conditioning.</i>
<b>Pecosil FSH-300</b>	Perflourononyl Dimethicone	<i>Excellent anti-frizz agents. Promotes lustrous light hair conditioning</i>
<b>Pecosil FSH-1500</b>	Perflourononyl Dimethicone	<i>Excellent anti-frizz agents. Promotes lustrous light hair conditioning</i>
<b>Pecosil FSL-150</b>	Perflourononyl Dimethicone	<i>Excellent anti-frizz agents. Promotes lustrous light hair conditioning</i>
<b>Pecosil FSL-300</b>	Perflourononyl Dimethicone	<i>Excellent anti-frizz agents. Promotes lustrous light hair conditioning</i>
<b>Pecosil FSU-150</b>	Perflourononyl Dimethicone	<i>Excellent anti-frizz agents. Promotes lustrous light hair conditioning</i>
<b>Pecosil FSU-300</b>	Perflourononyl Dimethicone	<i>Excellent anti-frizz agents. Promotes lustrous light hair conditioning</i>

## DICOPAMINE<sup>®</sup> Silicones – Organofunctional

<b>Product</b>	<b>INCI Name</b>	<b>Description</b>
<b>Dicopamine PC-35</b>	Cetrimonium Chloride & Dimethicone PEG-7 Phosphate	<i>Extremely mild conditioning complex.</i>

# PHOENOMULSE<sup>®</sup> Emulsions and Emulsion Aids

Product	INCI Name	Description
<b>Phoenomulse 100</b>	Water (and) Polyhydroxystearic acid (and) Isononyl Isononanoate (and) Ethylhexyl Isononanoate (and) Sodium Cocamidopropyl PG-Dimonium Chloride Phosphate	<i>Oil-in-water emulsion aid.</i>
<b>Phoenomulse CE-1</b>	Polyhydroxystearic acid (and) Isononyl Isononanoate (and) Ethylhexyl Isononanoate (and) Sodium Cocamidopropyl PG-Dimonium Chloride Phosphate (and) Methyl Perfluorobutyl Ether (and) Methyl Perfluoroisobutyl Ether	<i>CE-1 miscelle destabilizes releasing the fluoro component causing the surfactants in the products base to produce a continuous self-foaming effect. Foam character can be adjusted with surfactant blend modifications.</i>
<b>Phoenomulse CE-5</b>	Water (and) Decafluoropentane (and) Polyhydroxystearic Acid (and) Sodium Cocamidopropyl PG-Dimonium Chloride Phosphate (and) Isononyl Isononanoate (and) Ethylhexyl Isononanoate	<i>CE-5 miscelle destabilizes releasing the fluoro component causing the surfactants in the products base to produce a continuous self-foaming effect. Foam character can be adjusted with surfactant blend modifications.</i>

# PECOGEL<sup>®</sup> Polymeric Cosmetic Hydrogels

Forms a flexible, non-tacky film when dry and the film is slippery when wet. Substantivity to hair and skin while maintaining excellent film properties. Exhibit low solution viscosities and non-pituitous flow behavior.

Product	INCI Name	Description
<b>Pecogel H-12/A</b>	VP/Polycarbamyl Polyglycol Ester	<i>Polymer solution in water. Forms a flexible, non-tacky film. Once film is dry the polymer resists removal when wet. Has fragrance holding and slow release properties when mild heat and moisture are present.</i>
<b>Pecogel H-115/A</b>	VP/Polycarbamyl Polyglycol Ester	<i>Same as H-12/A. Has greater water resistance.</i>
<b>Pecogel H-1220/A</b>	VP/Polycarbamyl Polyglycol Ester	<i>Same as H-115/A. Has greater water resistance.</i>
<b>Pecogel GC-310/A</b>	VP/Dimethylaminoethylmethacrylate/ Polycarbamyl Polyglycol Ester	<i>Silicone based cosmetic hydrogel.</i>
<b>Pecogel GC-1110/A</b>	VP/Dimethylaminoethylmethacrylate/ Polycarbamyl Polyglycol Ester	<i>Same as GC-310/A with greater water resistance.</i>
<b>Pecogel S-1120/A</b>	VP/Dimethiconylacrylate/ Polycarbamyl Polyglycol Ester	<i>Nonionic aqueous solution of inter polymers of unique silicone containing copolymers. Exhibits low solution viscosities an non-pituitous flow behavior.</i>
<b>Pecogel S-2120/A</b>	VP/Dimethiconylacrylate/ Polycarbamyl Polyglycol Ester	<i>Same as S-1120/A, but has more Dimethiconylacrylate.</i>
<b>Pecogel HS-501/A</b>	VP/Dimethiconylacrylate/ Polycarbamyl Polyglycol Ester	<i>Silicone based film-former. Film is flexible and non-tacky when wet and thicker than other Hydrogels.</i>

## GIOVAREZ® & PECOREZ® Polymers

Product	INCI Name	Description
<b>Giovarez 1800</b>	Polyvinyl Stearyl Ether	A film forming waxy polymer. Useful for color development, gloss in lipstick and volumizer in mascara.
<b>Giovarez AC-34M</b>	Isododecane (and) Acrylic Acid/Isobornyl Methacrylate/Isobutyl Methacrylate Copolymer	Clear liquid, dries to a continuous, glossy, hard, continuous insoluble film. Transfer resistant.
<b>Giovarez AC-5099M</b>	Isododecane (and) Acrylates Copolymer	Useful in non-transfer make-up, lipstick and mascara.
<b>Giovarez ACW-372</b>	Acrylic Resin (and) Triethylammonium Salt	Forms a clear glossy film. Ideal for water based nail enamels.
<b>Giovarez BTB-50</b>	Isododecane (and) Behenyl Methacrylate/t-Butyl Methacrylate Copolymer	Glossy, clear, continuous, hard but flexible, water-insoluble film. When formulated into cosmetic products, the polymer film becomes more flexible due to oils and esters present in the formulated product which act as plasticizers for the acrylic film.
<b>Giovarez P-0580</b>	Polyurethane 21	Water based polyurethane
<b>Pecorez AC-50</b>	Butyl Acetate (and) Acrylate Copolymer	Forms a clear, hard, smooth, glossy, non-yellowing film. Ideal for nail enamels.
<b>Pecorez AC-50E</b>	Ethyl Acetate (and) Acrylate Copolymer	Forms a clear, hard, smooth, glossy, non-yellowing film. Ideal for nail enamels.

## CATEMOL® Amidoamines

Product	INCI Name	Description
<b>Catamol 220</b>	Behenamidopropyl Dimethylamine	Adds body to hair and builds viscosity
<b>Catamol C-120</b>	Cocamidopropyl Dimethylamine	Similar to 220, lower molecular weight and improves dry-comb.
<b>Catamol S-180</b>	Stearamidopropyl Dimethylamine	Builds viscosity and functions as a hair conditioner
<b>Catamol 360</b>	Dilinoleamidopropyl Dimethylamine	Ideal for rinse-off and leave-in conditioners.

## CATEMOL® Quaternaries & Cationic Organic Salts

Product	INCI Name	Description
<b>Catamol HBC-18</b>	Hydroxypropyl Bisstearyldimonium Chloride	Hair conditioner. Paste.
<b>Catamol I-18-ES</b>	Isostearamidopropyl Ethyldimonium Ethosulfate	Functions as an anti-static agent and an oil emulsifier and a viscous liquid hair conditioner.
<b>Catamol MMM</b>	Cocamidopropyl Trimonium Chloride	Excellent hair conditioner. Anti-stat to mitigate static flyaway. Superior viscosity thickening.
<b>Catamol WPL</b>	Lapyrium Chloride	Hair and skin conditioner. Substantive with excellent after feel on hands and skin.
<b>Catamol WPC</b>	Steapyrium Chloride	Hair and skin conditioner. Substantive with excellent after feel on hands and skin.
<b>Catamol 1825L</b>	Stearamidopropyl Dimethylamine Lactate	Emulsifier and viscosity builder for conditioners.
<b>Catamol 220B</b>	Behenamidopropyl Dimethylamine Behenate	Superior cationic conditioner and viscosity builder. Dissolves in oils upon warming and gels upon cooling.
<b>Catamol S180-S</b>	Stearamidopropyl Dimethylamine Stearate	Similar to Catamol 220-B.

# PHOENAMID<sup>®</sup> & PHOENAMIDE<sup>®</sup>

Product	INCI Name	Description
<b>Phoenamid 70 Extra</b>	Cocamide MEA	Used in color hair systems at levels of 28-30% gives firm gel with no drip or running which significantly reduces dye staining on scalp.
<b>Phoenamide LMEA</b>	Lactamide MEA	Humectant for skin and hair dye products. Smooth, non-greasy skin feel. Adds sheen and to dull and over treated hair.

# NEOPRO<sup>®</sup> Proteins & Proteins Derivatives

Product	INCI Name	Description
<b>Neopro EW</b>	Albumin	Helps build viscosity and boosts foam in shampoo and body washes. Restores luster to hair.
<b>Neopro HEW</b>	Hydrolyzed Albumin	Enzymatically hydrolyzed egg whites. Promotes shine and adds volume to hair. Builds viscosity and lather.
<b>Neopro W-40</b>	Hydrolyzed Wheat Protein/PEG-20 Acetate Copolymer	Substantive film forming conditioner. Repairs split ends, helps moisturize and hydrate dry hair.

# PHOENOXOL<sup>®</sup> Alkoxylated Alcohols

Product	INCI Name	Description
<b>Phenoxol BD-10P</b>	PPG-10 Butanediol	Lightens heavy greasy feel of heavier emollients. Ideal for lotions, foundations and antiperspirants
<b>Phenoxol G-7</b>	Glycereth-7	Emulsifier, water soluble emollient
<b>Phenoxol G-26</b>	Glycereth-26	Emulsifier, solubilizer
<b>Phenoxol L-2</b>	Laureth-2	Emulsifier
<b>Phenoxol L-4</b>	Laureth-4	Emulsifier
<b>Phenoxol L-7</b>	Laureth-7	Emulsifier
<b>Phenoxol L-9</b>	Laureth-9	Emulsifier
<b>Phenoxol L-10</b>	Laureth-10	Emulsifier
<b>Phenoxol L-23</b>	Laureth-23	Emulsifier, solubilizer
<b>Phenoxol OL-3</b>	Oleth-3	Emulsifier
<b>Phenoxol OL-5</b>	Oleth-5	Emulsifier
<b>Phenoxol OL-10</b>	Oleth-10	Emulsifier
<b>Phenoxol PW</b>	Cetearyl Alcohol Polysorbate 60	Emulsifier
<b>Phenoxol STA-2</b>	Steareth-2	Emulsifier
<b>Phenoxol STA-20</b>	Steareth-20	Emulsifier
<b>Phenoxol STA-2050</b>	Steareth-20	Emulsifier, 50% water solution
<b>Phenoxol T</b>	Cetearyl Alcohol & Steareth 30 & Ceteth-10	Emulsifier

## PHOENOXIDE<sup>®</sup> Alkoxyated Acids

Product	INCI Name	Description
<b>Phoenoxide C0-5</b>	PEG-5 Castor Oil	Emulsifier
<b>Phoenoxide C0-25</b>	PEG-25 Castor Oil	Fragrance solubilizer & emulsifier
<b>Phoenoxide C0-40</b>	PEG-40 Castor Oil	Fragrance solubilizer & emulsifier
<b>Phoenoxide E-400</b>	PEG-400	Humectant, solvent, emulsifier
<b>Phoenoxide HCO-16</b>	PEG-16 Hydrogenated Castor Oil	Emulsifier
<b>Phoenoxide HCO-40</b>	PEG-40 Hydrogenated Castor Oil	Superior fragrance solubilizer
<b>Phoenoxide NP-4</b>	Nonoxynol-4	Emulsifier
<b>Phoenoxide NP-9</b>	Nonoxynol-9	Emulsifier
<b>Coscap G7-MC</b>	Glycereth-7 Trimethyl Ether	Produces light dry, silky emolliency. Is stable over a wide pH range

## PHOENATE<sup>®</sup> PEG Esters

Product	INCI Name	Description
<b>Phoenate 150 DSA</b>	PEG-150 Distearate	Efficient thickener for shampoos, facial cleanser & transparent body washes
<b>Phoenate 3 DSA</b>	PEG-3 Distearate	Forms fine, highly aesthetic pearl in shampoos and other surfactants systems
<b>Phoenate DL-4</b>	PEG-4 Dilaurate	Water dispersible emollient emulsifier
<b>Phoenate DL-8</b>	PEG-8 Dilaurate	Water dispersible oil soluble emulsifier and emollient
<b>Phoenate DO-8</b>	PEG-8 Dilaurate	Water dispersible oil soluble emulsifier and emollient
<b>Phoenate GC-7</b>	PEG-7 Glyceryl Cocoate	Emulsifier & emollient. Useful in both aqueous and anhydrous systems
<b>Phoenate GC-30</b>	PEG-30 Glyceryl Cocoate	Liquid emulsifier for o/w emulsions
<b>Phoenate MO-8</b>	PEG-8 Oleate	Emulsifier & emollient. Useful in both aqueous and anhydrous systems
<b>Phoenate MO-12</b>	PEG-12 Monoleate	Emulsifier & emollient. Useful in both aqueous and anhydrous systems

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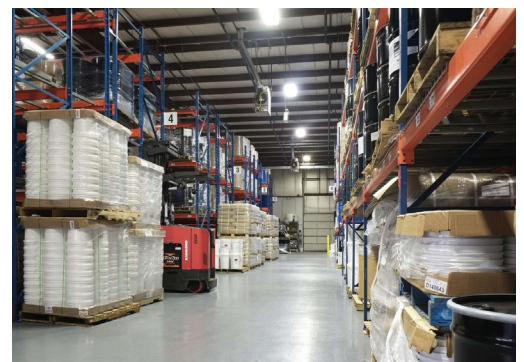
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