



Hair Care

Ingredients Portfolio

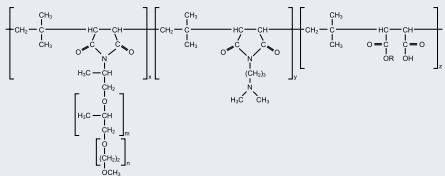
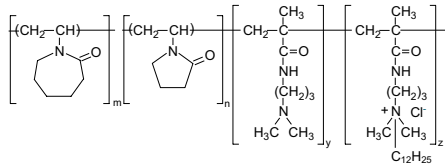
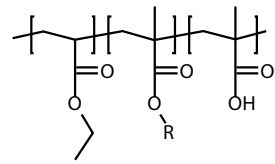
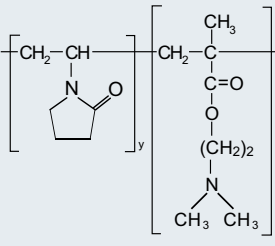
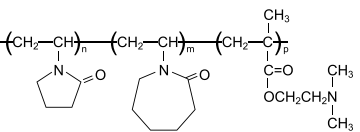
ASHLAND®

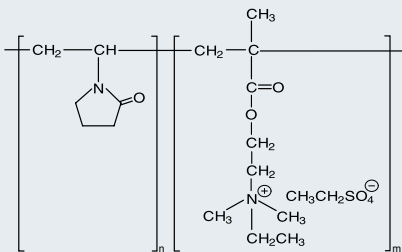
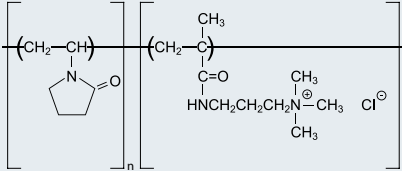
With good chemistry great things happen.™

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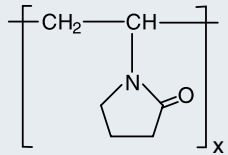
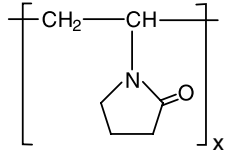
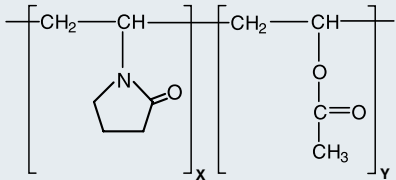
Fixatives and Styling Polymers

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Advantage™ LC-A polymer	Vinyl Caprolactam/VP/ Dimethylaminoethyl Methacrylate Copolymer	37% solids in ethanol		<ul style="list-style-type: none"> • Strong, durable hold • Stiff feel with good flexibility • Superior high humidity curl retention at low solids level • Excellent shine • High propellant tolerance • No neutralization required 	<ul style="list-style-type: none"> • Aerosol hairsprays • Non-aerosol hairsprays 	0.5 – 4.0% solids
Advantage LC-E polymer (Available in EU only)	Vinyl Caprolactam/VP/ Dimethylaminoethyl Methacrylate Copolymer (and) Lauryl Pyrrolidone					
Advantage S polymer	Vinyl Caprolactam/VP/ Dimethylaminoethyl Methacrylate Copolymer	Powder		<ul style="list-style-type: none"> • Strong, durable hold • Stiff feel with good flexibility • Excellent high humidity curl retention at low solids level • Excellent shine • High propellant tolerance and formulates into both high and low VOC products • No neutralization required • Enables alcohol-free claims 	<ul style="list-style-type: none"> • Gels • Mousses • Hairsprays • Pomades, waxes, pastes 	0.5 – 4.0% solids
Advantage S Solution polymer		30% aqueous solution				
Advantage Plus polymer	VA/Butyl Maleate/ Isobornyl Acrylate Copolymer	Clear pale yellow solution		<ul style="list-style-type: none"> • Medium hold • Excellent high humidity curl retention • Good spray aesthetics with fast dry time 	<ul style="list-style-type: none"> • Aerosol hairsprays • Non-aerosol hairsprays 	0.5 – 5.0% solids
Advantage 4910 polymer	Octylacrylamide/ Acrylates/ Butylaminoethyl Methacrylate Copolymer	Powder		<ul style="list-style-type: none"> • Excellent high humidity curl retention • Exceptional stiffness • Long-lasting hold • High propellant tolerance • Works in all VOC systems 	<ul style="list-style-type: none"> • Aerosol hairsprays • Non-aerosol hairsprays 	0.5 – 5.0% solids
Aquaflex™ FX-64 polymer	Isobutylene/ Ethylmaleimide/ Hydroxyethyl Maleimide Copolymer	40% solids in hydro- alcoholic solution		<ul style="list-style-type: none"> • Provides superior “stiff” hold • Good curl memory • Excellent high humidity curl retention • Shine • Manageability • No neutralization required 	<ul style="list-style-type: none"> • Aerosol hairsprays • Non-aerosol hairsprays • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	Aerosol sprays: 0.25 – 5% solids Non-aerosol sprays: 0.25 – 7% solids
Aquaflex SF-40 polymer	VP/Vinyl Caprolactam/ DMAA Acrylates Copolymer	40% solids in ethanol		<ul style="list-style-type: none"> • Can be formulated at all VOC levels • Good sprayability • Excellent high humidity curl retention • Low-tack • High propellant compatibility 	<ul style="list-style-type: none"> • Aerosol hairsprays • Non-aerosol hairsprays 	Aerosol sprays: 1.0 – 5% solids Non-aerosol sprays: 0.5 – 5% solids

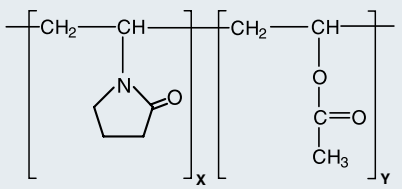
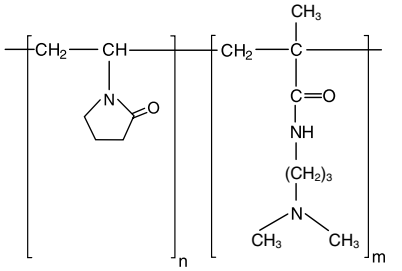
Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
AquaFlex™ XL-30 polymer	Polyimide-1	30% aqueous solution		<ul style="list-style-type: none"> • Volume and root boost • Synergistic high humidity curl retention when used with typical thickeners • Flexibility gives style memory • Durable hold • Dry films on hair are smooth 	<ul style="list-style-type: none"> • Gels • Spray gels • Spray mousses • Pomades, waxes, pastes • Shampoos • Conditioners • Hair treatments 	0.25 – 4.0% solids
AquaStyle™ 300 polymer ¹	Polyquaternium- 69	30% solids in hydroalcoholic solution		<ul style="list-style-type: none"> • Long-lasting hold • Stiff, strong hold with mechanical durability • Excellent high humidity curl retention • Enhances shine • Reduction of frizz • AquaStyle 300 AF support alcohol-free claims, meets low-VOC requirements • Synergistic thickening with hydrophobically modified gellants • Forms a sprayable polyelectrolyte matrix when used in conjunction with one of the following rheology modifiers (Ashland™ 980/940 Carbomer, RapiThix A-60) 	<ul style="list-style-type: none"> • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes • Styling sprays (non-aerosol) 	0.25 – 5.0% solids
AquaStyle 300 AF polymer ¹		30% aqueous solution				
AquaStyle SH- 100 polymer	Acrylates Copolymer (and) Water	Milky, white to off-white liquid		<ul style="list-style-type: none"> • Durable, all day hold • Good initial stiffness • Excellent high humidity curl retention • Smooth comb-through • No tack upon drying • No flaking • Contributes to viscosity in formulations 	<ul style="list-style-type: none"> • Crystal clear gels • Cream gels • Spray gels • Creams and lotions • Waxes and pomades • Mousses • Patent pending 	0.5 – 2.0% solids
Copolymer 845	VP/Dimethylaminoethyl Methacrylate Copolymer	20% aqueous solution		<ul style="list-style-type: none"> • Aids wet and dry combing • Imparts smoothness, gloss, body and silky feel to hair • Gives smooth, conditioned feel to skin • Water and alcohol compatible • Copolymer 845 is compatible with Carbomer and can be formulated into clear gels • Forms a sprayable polyelectrolyte matrix when used in conjunction with one of the following rheology modifiers (Ashland 980/940 Carbomer, RapiThix A-60) 	<ul style="list-style-type: none"> • Gels • Mousses • Blow-dry conditioners • Styling creams/lotions • Pomades, waxes, pastes • Conditioning rinses • Styling sprays • Low-VOC sprays 	0.2 – 4.0% solids
Copolymer 845 O (Optiphen™ Preserved)						
Copolymer 937		20% aqueous solution				
Copolymer 958		50% solids in ethanol				
Gaffix™ VC-713 polymer (sold as Copolymer VC- 713 in EU)	Vinyl Caprolactam/ VP/ Dimethylaminoethyl Methacrylate Copolymer	37% solids in ethanol		<ul style="list-style-type: none"> • Superior “natural feel” hold at low solids level • Excellent propellant compatibility • No neutralization required 	<ul style="list-style-type: none"> • Hairsprays • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.5 – 4.0% solids

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Gafquat™ 440 polymer	Polyquaternium-11	Flowable 30% alcoholic solution; 100,000 avg. MW		<ul style="list-style-type: none"> • Good wet and dry combing • Good curl retention • Clear, non-tacky films • Builds body • Enhances hair luster • Manageability • Easy shampoo removability • Improves foam aesthetics • Smooth skin application with desirable after-feel 	<ul style="list-style-type: none"> • Mousses • Gels • Styling sprays • Pomades, waxes, pastes • Leave-in conditioning lotions 	0.25 – 8.0% solids
Gafquat 755N polymer		Highly viscous 20% aqueous solution; 1,000,000 avg. MW		<ul style="list-style-type: none"> • Thermal/mechanical protection • Good wet and dry combing • Good curl retention in leave-on hair styling products • Clear, non-tacky films • Builds body • Enhances hair luster • Manageability • Improves foam aesthetics • Easy shampoo removability • Smooth skin application with desirable after-feel • Forms a sprayable polyelectrolyte matrix when used in conjunction with one of the following rheology modifiers (Ashland 980/940 Carbomer, RapiThix A-60) 	<ul style="list-style-type: none"> • Mousses • Gels • Pomades, waxes, pastes • Shampoos • Conditioning rinses • Leave-in conditioning lotions • Styling sprays 	0.25 – 4.0% solids
Gafquat 755N-P polymer (phenoxyethanol-paraben preserved)						
Gafquat 755N-O polymer (Optiphen™ preserved)						
Gafquat HS-100 polymer	Polyquaternium-28	20% aqueous solution		<ul style="list-style-type: none"> • Good wet and dry combing • Good curl retention in leave-on hair styling products • Clear, non-tacky films • Enhances hair luster • Excellent stability at pH extremes • Forms a sprayable polyelectrolyte matrix when used in conjunction with one of the following rheology modifiers (Ashland 980/940 Carbomer, RapiThix A-60) 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Styling creams/lotions • Gels • Mousses • Pomades, waxes, pastes • Styling sprays • Permanent wave solutions 	Shampoos/ conditioners: up to 1.0% solids
Gafquat HS-100-0 polymer (Optiphen preserved)						Styling: 2.0 – 4.0% solids

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Gantrez™ A-425 polymer	Butyl Ester of PVM/MA Copolymer	50% solids in ethanol		<ul style="list-style-type: none"> • High hold • Excellent shine • Durability • Tack-free • Good style retention • Humidity resistant • Good propellant compatibility • Pigment dispersant • Emulsion stabilizer 	<ul style="list-style-type: none"> • Aerosol hairsprays • Non-aerosol hairsprays • Spritzer gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.5 – 7.0% solids
Gantrez ES-225 polymer	Ethyl Ester of PVM/MA Copolymer	50% solids in ethanol				
Gantrez ES-335 polymer	Isopropyl Ester of PVM/MA Copolymer	50% solids in isopropanol				
Gantrez ES-425 polymer	Butyl Ester of PVM/MA Copolymer	50% solids in ethanol				
Gantrez ES-435 polymer	Butyl Ester of PVM/MA Copolymer	50% in isopropanol				
Gantrez SP-215 polymer	Ethyl Ester of PVM/MA Copolymer	50% solids in ethanol				
Omnirez™ 2000 polymer	Ethyl Ester of PVM/MA Copolymer	50% solids ethanol		<ul style="list-style-type: none"> • Suitable for low-VOC and anhydrous products • High hold • Excellent shine • Durability • Tack-free • Good style retention • Humidity resistant • Good propellant compatibility • Low solution viscosity 	<ul style="list-style-type: none"> • Aerosol hairsprays • Non-aerosol hairsprays • Mousses • Pomades, waxes, pastes 	0.5 – 8.0% solids
Primaflo™ HP22 polymer solution	Hydroxypropylcellulose	Solution		<ul style="list-style-type: none"> • Soft, flexible films • High strength films • Non-tacky films 	<ul style="list-style-type: none"> • Low- and no-VOC hair styling gels, mousses and sprays 	2.0 – 5.0% solids

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
PVP K-15	PVP	100% powder; 8000 avg. MW in Daltons		<ul style="list-style-type: none"> • Strong, stiff hold • Stabilizes emulsions, dispersions and suspensions • Foam stabilizer • Excellent compatibility with acrylate thickeners • Shine 	<ul style="list-style-type: none"> • Gels • Mousses • Styling creams/lotions • Hair colorants • Pomades, waxes, pastes • In addition, PVP K-15 and PVP K-30 can be used in hairsprays 	0.25 – 6.0% solids
PVP K-15 solution		30% solution; 8000 avg. MW in Daltons				0.25 – 6.0% solids
PVP K-30		100% powder; 60,000 avg. MW in Daltons				0.25 – 6.0% solids
PVP K-30 solution		30% solution; 60,000 avg. MW in Daltons				0.25 – 6.0% solids
PVP K-60 solution	PVP	45% solution; 400,000 avg. MW in Daltons		<ul style="list-style-type: none"> • Strong, stiff hold • Stabilizes emulsions, dispersions and suspensions • Foam stabilizer • Excellent compatibility with acrylate thickeners • Shine 	<ul style="list-style-type: none"> • Gels • Mousses • Styling creams/lotions • Hair colorants • Pomades, waxes, pastes 	0.25 – 6.0% solids
PVP K-90		100% powder; 1,300,000 avg. MW in Daltons				0.25 – 3.0% solids
PVP K-90 solution		20% solution; 1,300,000 avg. MW in Daltons				0.25 – 3.0% solids
PVP K-120 powder		100% powder; 3,000,000 avg. MW in Daltons				0.25 – 3.0% solids
PVP/VA S-630	VP/VA Copolymer	White powder (60/40 [‡])		<ul style="list-style-type: none"> • Strong, stiff hold • Enhanced high humidity curl retention • Good propellant compatibility 	<ul style="list-style-type: none"> • Gels • Mousses • Styling creams/lotions • Hair colorants • Pomades, waxes, pastes 	0.5 – 6.0% solids
PVP/VA E-335 PVP/VA I-335		50% solution in ethanol (E) or isopropanol (I), (30/70 [‡])			<ul style="list-style-type: none"> • Aerosol hairsprays • Non-aerosol hairsprays 	
PVP/VA E-535 PVP/VA I-535		50% solution in ethanol (E) or isopropanol (I), (50/50 [‡])			<ul style="list-style-type: none"> • Hydroalcoholic styling lotions and hair thickeners 	

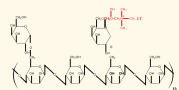

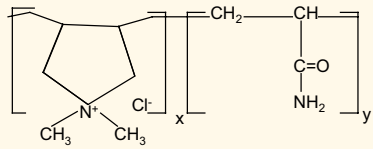
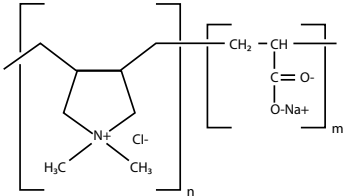
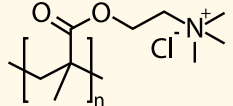
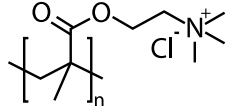
‡ Ratio (VP/VA)

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
PVP/VA E-635 PVP/VA W-635	VP/VA Copolymer	50% solution in aqua (W) or ethanol (E) (60/40 [‡])		<ul style="list-style-type: none"> • Strong, stiff hold • Enhanced high humidity curl retention • Good propellant compatibility 	<ul style="list-style-type: none"> • Alcohol-free formulas (W) • Gels • Mousses • Styling creams/lotions • Hair colorants • Pomades, waxes, pastes 	0.5 – 6.0% solids
PVP/VA E-735 PVP/VA I-735 PVP/VA W-735		50% solution in water (W), ethanol (E) or isopropanol (I) (70/30 [‡])			<ul style="list-style-type: none"> • “Wet look” gels • Water-based aerosol mousses • (E) & (I) used in anhydrous aerosols • (W) in alcohol-free formulas • Gels • Mousses • Styling creams/lotions • Hair colorants • Pomades, waxes, pastes 	
Styleze CC-10 polymer ¹	VP/DMAA Acrylates Copolymer	10% aqueous solution		<ul style="list-style-type: none"> • Superior, durable hold • Clear, non-tacky films • Long-lasting curl retention • Substantive to hair • Conditioning and bodying effects • Shine • Manageability • Clean feel • Thermal protection • Volumizing effects in shampoos • Forms a sprayable polyelectrolyte matrix when used in conjunction with one of the following rheology modifiers (Ashland 980/940 Carbomer, RapiThix A-60) 	<ul style="list-style-type: none"> • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes • Styling sprays (non-aerosol) • Shampoos • Conditioners 	Styling: 0.25 – 2.0% solids Sham-poops/Con- ditioners: 0.5 – 1.0% solids

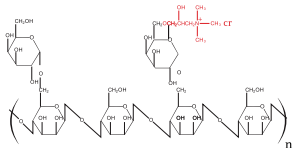
[‡] Ratio (VP/VA)

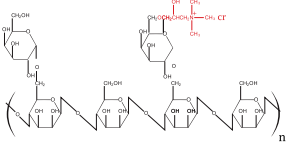
Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Styleze™ W-10 polymer ¹	Polyquaternium-55	10% aqueous solution		<ul style="list-style-type: none"> • Firm hold • Longevity of style • High humidity resistance • High flexibility • Conditioning • Low-tack • Volume • Color protection • Thermal protection • Forms a sprayable polyelectrolyte matrix when used in conjunction with one of the following rheology modifiers (Ashland 980/940 Carbomer, RapiThix A-60, Stabileze SM) 	<ul style="list-style-type: none"> • Gels • Mousses • Styling creams/lotions • Leave-in conditioners • Pomades, waxes, pastes • Styling sprays (non-aerosol) • Shampoos • Conditioners 	<p>Gels, Mousses, Lotions: 0.25 – 2.0% solids</p> <p>Shampoos/Conditioners: 0.25 – 1.0% solids</p>
Styleze W-17 polymer ¹		17% aqueous solution				
Styleze W-20 polymer ¹		20% aqueous solution				
Styleze XT3 polymer ¹	Water (and) PVM/MA Copolymer (and) Polyimide-1 (and) Caprylyl Glycol			<ul style="list-style-type: none"> • Frizz reduction • Enhances thermal styling, straight or curly • Thermal protection • Humidity resistance • Shine • Smooth, touchable hair • Lively, flowable texture • Lasting style hold • Smooth combing • Enhances hair's natural texture • Improved hair alignment/manageability 	<ul style="list-style-type: none"> • Styling creams/lotions • Gels • Mousses • Lotions 	4% solids (13.5% as is)

Conditioning Polymers

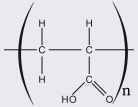
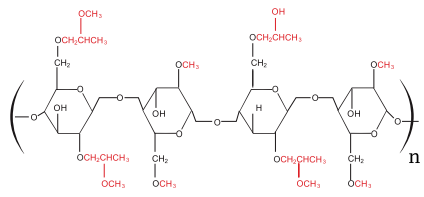
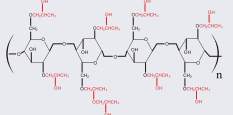
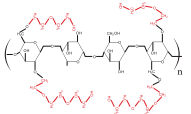
Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
AquaCat 518 cationic solution	Guar Hydroxypropyltrimonium Chloride	Clear solution		<ul style="list-style-type: none"> • Light conditioning • Volumizing 	<ul style="list-style-type: none"> • Volumizing shampoos • Daily shampoos 	0.2 – 0.4%
AquaCat PF 618 cationic solution	Guar Hydroxypropyltrimonium Chloride	Clear solution		<ul style="list-style-type: none"> • Paraben-free • Light conditioning • Volumizing 	<ul style="list-style-type: none"> • Volumizing shampoos • Daily shampoos 	0.2 – 0.4%
Conditioneze™ 7MP cationic solution	Polyquaternium-7	8.0 - 10% aqueous solution		<ul style="list-style-type: none"> • Efficient conditioning at low concentrations • Binds to skin and hair keratin at multiple sites • Imparts slip and lubricity to formulations • Boosts viscosity with increasing concentration • Provides foam stability in shampoos 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Styling creams • Mousses • Hair dyes • Permanent wave solutions 	0.2 – 0.75% solids
Conditioneze™ 22 cationic solution	Polyquaternium-22	Clear solution		<ul style="list-style-type: none"> • Compatible with a wide range of anionic, nonionic and cationic surfactants • Stable over a wide pH range (pH 2-12) • Provides excellent conditioning, wet and dry combability • Leaves hair feeling soft and silky and contributes to luster. • Leaves a smooth and silky feel in skin care products • Preserved with methyl and propyl parabens 	<ul style="list-style-type: none"> • Shampoos • Conditioners formulated especially for damaged and treated hair • Colorant products • Ethnic hair care products 	1.0 – 3.0 %
Conditioneze 37 PC (E) cationic solution	Polyquaternium-37 and propylene Glycol Dicaprylate/ Dicaprate and PPG-1 Trideceth-6	Opaque liquid		<ul style="list-style-type: none"> • Provides excellent conditioning and emulsion stabilization in hair and skin products • Easy to incorporate into formulations with no requirements for heating or neutralization • Compatible with nonionic and cationic surfactants • Efficiently build viscosity at low usage levels even at low pH levels 	<ul style="list-style-type: none"> • Conditioners • Hair masks • Rheology 	2.0 – 4.0 %
Conditioneze 37 PC (M) cationic solution	Polyquaternium-37 and Mineral Oil and PPG-1 Trideceth-6	Opaque liquid		<ul style="list-style-type: none"> • Provides excellent conditioning and emulsion stabilization in hair and skin products • Easy to incorporate into formulations with no requirements for heating or neutralization • Compatible with nonionic and cationic surfactants • Efficiently build viscosity at low usage levels even at low pH levels 	<ul style="list-style-type: none"> • Conditioners • Hair masks • Rheology 	2.0 – 4.0 %

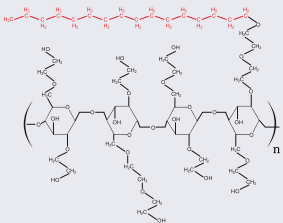
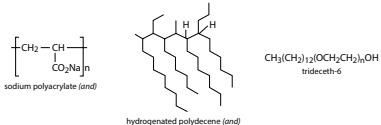
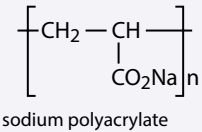
Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Conditioneze NT-20 cationic solution	Polyquaternium-28	20% aqueous solution		<ul style="list-style-type: none"> • Excellent wet and dry combing • Builds creamy, rich lather • Imparts body and manageability without build-up • Cold processable 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Styling creams/lotions • Gels • Mousses • Pomades, waxes, pastes • Permanent wave solutions 	Sham-poops/ Condition-ers: 0.25 – 1.0% solids Styling: 2.0 – 4.0% solids
Conditioneze NT-20-0 cationic solution (Optiphen™ preserved)						
Gafquat™ HSi cationic solution	Polyquaternium-28 (and) Dimethicone	20% aqueous solution		<ul style="list-style-type: none"> • Combines benefits of film-forming polymers and dimethicone while minimizing drawbacks associated with silicones such as greasy feel and build-up • Conditioning • Compatible with anionic surfactants • Stabilizes foam • Good storage stability 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Conditioning treatments • Gels • Mousses • Pomades, waxes, pastes 	Styling: 1.0 – 2.0% solids Sham-poops/ Condition-ers: 0.2 – 1.0% solids
N-DurHance™ A-1000 conditioning polymer	Polyacrylamidopropyl-trimonium Chloride	Clear solution		<ul style="list-style-type: none"> • High conditioning durability • No build-up • Preservative free • Compatable with cationics and nonionics 	<ul style="list-style-type: none"> • Leave-on and rinse-off conditioners • Hair masks • Conditioning sprays • Shampoos 	0.1 – 1.0 % solids
N-Hance SP-100 polymer	Acrylamidopropyl Trimonium Chloride/ Acrylamide Copolymer	Powder		<ul style="list-style-type: none"> • Excellent wet/dry combability in silicone and non-silicone formulations • Optical clarity • Fast detangling of hair • Leaves wet and dry hair noticeably silkier • High deposition of actives (silicone, anti-dandruff, natural oils, etc.) 	<ul style="list-style-type: none"> • Ethnic hair products • Highly damaged/bleached/ treated hair • Anti-dandruff shampoos • Silicone deposition 	0.1 – 0.2%
N-Hance 4572 conditioning polymer	Guar Hydroxypropyl-trimonium Chloride and Acrylamidopropyl Trimonium Chloride/ Acrylamide Copolymer				<ul style="list-style-type: none"> • Shampoos • Conditioners 	0.15 – 0.25%

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
N-Hance™ BF17 cationic guar	Guar Hydroxypropyl- trimonium Chloride	Powder		<ul style="list-style-type: none"> • High conditioning, wet and dry combing • Active deposition aid • Efficient silicone deposition • Softer hair feel • Lather richness 	<ul style="list-style-type: none"> • Shampoos/2-in-1 shampoos for <ul style="list-style-type: none"> • Ethnic hair • Highly damaged/bleached/treated hair • Silicone deposition • Anti-dandruff shampoos 	0.2 – 0.4%
N-Hance 3215 cationic guar					<ul style="list-style-type: none"> • Deep conditioning • Ethnic hair products • Highly damaged/bleached/treated hair • Anti-dandruff shampoos • High active deposition • Silicone deposition 	
N-Hance 3196 cationic guar				<ul style="list-style-type: none"> • Medium conditioning, wet and dry combing • Medium deposition aid • Efficient silicone deposition • Softer hair feel • Lather richness 	<ul style="list-style-type: none"> • Shampoos/2-in-1 shampoos for <ul style="list-style-type: none"> • Ethnic hair • Highly damaged/bleached/treated hair • Silicone deposition • Anti-dandruff shampoos 	0.1 – 0.4%
N-Hance™ BF13 cationic guar					<ul style="list-style-type: none"> • Damaged/bleached/treated hair • Virgin hair • Silicone deposition • Active deposition • Daily shampoos • Anti-dandruff shampoos 	
N-Hance CG13 cationic guar					<ul style="list-style-type: none"> • Damaged/bleached/treated hair • Virgin hair • Silicone deposition • Active deposition • Daily shampoos 	0.2 – 0.4%
N-Hance CCG45 cationic guar				<ul style="list-style-type: none"> • Light to medium conditioning, wet and dry combing • Medium deposition aid • Efficient silicone deposition • Softer hair feel • Lather richness 	<ul style="list-style-type: none"> • Clear systems • Mildly damaged virgin hair • Volumizing shampoos • Daily shampoos 	

Trade Name	INCI Name	Description/Form	Structure	Features and Benefits	Applications	Use Levels
N-Hance 3000/3299 cationic guar	Guar Hydroxypropyl-trimonium Chloride	Powder		<ul style="list-style-type: none"> • Low viscosity • Low conditioning 	<ul style="list-style-type: none"> • Light conditioning shampoos • Volumizing shampoos 	
N-Hance C261 cationic guar				<ul style="list-style-type: none"> • Low viscosity • Low conditioning • Self hydrating 		0.2 – 0.4%
N-Hance C261N cationic guar				<ul style="list-style-type: none"> • Low viscosity • Low conditioning 		0.2 – 0.4%

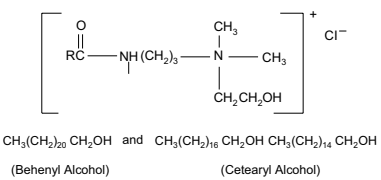
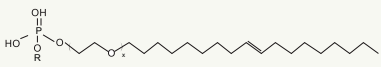
Rheology Modifiers

Trade Name	INCI Name	Description/Form	Structure	Features and Benefits	Applications	Use Levels
Ashland™ 980/940/981/941 Carbomer	Carbomer	Powder		<ul style="list-style-type: none"> • Rheology modifier • Stabilization 	<ul style="list-style-type: none"> • Shampoos • Styling products 	0.2 – 0.5%
Benecel™ HPMC	Hydroxypropyl Methylcellulose	Powder		<ul style="list-style-type: none"> • Stabilizes complex surfactant mixtures • Increases lather density • Increases lather volume • Increases lather stability • Thickens soap-based shampoos • Benecel K200M HPMC thickens hydroalcoholic systems 	<ul style="list-style-type: none"> • Shampoos • Styling products 	0.5 – 2.0%
Benecel E10 HPMC						
Benecel K200M HPMC						
Klucel™ hydroxypropylcellulose	Hydroxypropylcellulose	Powder		<ul style="list-style-type: none"> • Alcohol-soluble thickener • Film-former 	<ul style="list-style-type: none"> • Styling products 	0.2 – 1.0%
Natrosol™ hydroxyethylcellulose/ Natrosol 250 ME/ HR/HHR	Hydroxyethylcellulose	Powder		<ul style="list-style-type: none"> • Viscosity builder • Stabilization 	<ul style="list-style-type: none"> • Conditioners • Styling products 	0.2 – 1.0%

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Natrosol™ Plus 330 CS cetyl modified hydroxyethylcellulose	Cetyl Hydroxyethylcellulose	Powder		<ul style="list-style-type: none"> • Provides stability for complex anionic, cationic or nonionic surfactant systems • Thickens cationic emulsions 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Styling products • Natrosol Plus 330 CS can be used in APG-based systems 	0.5 – 1.5%
PolySurf™ 67 cetyl modified hydroxyethylcellulose						
RapiThix™ A-60 polymer	Sodium Polyacrylate (and) Hydrogenated Polydecene (and) Trideceth-6	White milky dispersion (57-59% solids)		<ul style="list-style-type: none"> • Easy-to-use emollient-based dispersion • Provides soft, smooth feel • Can be post-added to adjust viscosity after emulsion forms and cools • Produces instant crème gels at room temperature • High shear not required 	<ul style="list-style-type: none"> • Emulsifier-free products • Hair shine lotions • Anti-frizz products • Styling creams/lotions • Conditioning creams • Pomades, waxes, pastes 	Up to 3.6% solids
RapiThix A-100 polymer	Sodium Polyacrylate	White powder		<ul style="list-style-type: none"> • Fully active white powder offering greater formulation flexibility • Provides soft, smooth feel • No pre-set oil phase • Makes oil-free systems possible • High-solids content for higher efficiency 	<ul style="list-style-type: none"> • Emulsifier-free products • Hair shine lotions • Anti-frizz products • Styling creams/lotions • Conditioning creams • Pomades, waxes, pastes 	0.2 – 2.5%

Conditioners

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Ceraphyl™ 60 cationic solution	Quaternium-22	60% aqueous solution	$\left[\begin{array}{c} \text{OH} \quad \text{OH} \quad \text{HO} \quad \text{O} \\ \quad \quad \quad \\ \text{H}_2\text{C}-\text{CH}-\text{CH}-\text{CH}-\text{CH}-\text{C}-\text{NH}-(\text{CH}_2)_3-\text{N}(\text{CH}_3)_2-\text{CH}_2-\text{CH}_2\text{OH} \\ \quad \\ \text{OH} \quad \text{OH} \end{array} \right]^+ \text{Cl}^-$	<ul style="list-style-type: none"> Mild cationic with pronounced substantivity to hair Provides detangling, anti-static and conditioning Binds moisture in hair care applications 	<ul style="list-style-type: none"> Shampoos Conditioners Gels Mousses 	Up to 4.8% solids
Ceraphyl 65 cationic solution	Quaternium-26 (and) Propylene Glycol	55% solution	$\left[\begin{array}{c} \text{O} \\ \\ \text{R}-\text{C}-\text{NH}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{N}(\text{CH}_3)_2-\text{CH}_2-\text{CH}-\text{OH} \end{array} \right]^+ \text{Cl}^-$ <p>R= Mink fatty acids</p>	<ul style="list-style-type: none"> Mild cationic with pronounced substantivity to hair Provides detangling, anti-static and conditioning Cationic emulsification 	<ul style="list-style-type: none"> Shampoos Conditioners 	Up to 5% (rinse-off application only)
Ceraphyl 70 cationic solution	Quaternium-70 (and) Propylene Glycol	54% solution	$\left[\begin{array}{c} \text{O} \quad \quad \text{O} \\ \quad \quad \\ \text{C}_{17}\text{H}_{35}-\text{C}-\text{NH}-(\text{CH}_2)_3-\text{N}(\text{CH}_3)_2-\text{CH}_2-\text{C}-\text{O}-\text{C}_{14}\text{H}_{29} \end{array} \right]^+ \text{Cl}^-$	<ul style="list-style-type: none"> Mild cationic Pronounced substantivity to skin and hair Provides detangling, anti-static and conditioning Cationic emulsification Thermal protection from curling irons & blow dryers 	<ul style="list-style-type: none"> Shampoos Conditioners Mousses Cream gels Pomades, waxes, pastes Permanent wave solutions 	1.0% solids for thermal protection Up to 0.7% solids for rinse-off applications

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
ProLipid™ 161 lamellar gel ¹	Cetearyl Alcohol (and) Behenyl Alcohol (and) Hydroxyethyl Cetearamidopropyldi- monium Chloride	White to cream colored flakes		<ul style="list-style-type: none"> • Composed of vegetal-based amphiphilic compounds • Lamellar gel structurizing ingredient that enhances formulation texture and stability • Provides moisturization and conditioning to hair • Ease of wet and dry combing • Makes hair feels soft and smooth • Binder • Thickener • Opacifying agent • Anti-static • Substantive over a broad pH range 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Styling creams/ lotions • Mousses • Treatment applications targeting damaged and chemically treated hair • Hair colorants • Pomades, waxes, pastes • Permanent wave solutions • Hair relaxers 	1.67 – 6.67% by weight when used for conditioning 4.0 – 6.0% by weight when used as a structuring agent
Zenix™ 4617 phosphate ester surfactant	Oleth-5 Phosphate	Liquid		<ul style="list-style-type: none"> • Silicone-like performance without silicone when combined with cationic guar 	<ul style="list-style-type: none"> • Shampoos • 2-in-1 shampoos 	2.0 – 4.0%

Vincience™ BiotHAIRapy™ Biofunctionals

Trade Name	INCI Name	Description	Benefits
Capauxein™ biofunctional	Water (aqua) (and) Glycerin (and) Hydrolyzed Corn Protein	A corn extract inspired by the "Hair Fullness System™" critical for hair density	<ul style="list-style-type: none"> • Associated with <i>ex vivo</i> increase of proteins related to the improvement of communication and cell signaling such as laminin-5, β1 integrin and fibronectin • Associated with <i>ex vivo</i> increase of proteins involved in the maintenance of active cell cycle (p63, ki67) • Associated <i>ex vivo</i> with an improved appearance of hair length (on scalp model)
Chromafend™ biofunctional	Water (aqua) (and) Glycerin (and) Hydrolyzed Linseed Extract	A flax seed extract inspired by the "Hair Melanin System™" to help hair preserve its original color	<ul style="list-style-type: none"> • Associated <i>in vitro</i>, <i>ex vivo</i> with an increase of tyrosinase (tyrosinase is involved in melanin production) • Associated with the <i>in vitro</i> increase in TRP-1 (TRP-1 is known to participate in melanin synthesis) • Associated with <i>in vitro</i> increase in Pmel 17 (Pmel 17 is associated with favorable conditions for melanin synthesis) • Associated with an <i>in vitro</i> increase of MITF (MITF is known to regulate melanin synthesis) • Associated with an <i>in vitro</i> increase of c-kit (c-kit is associated with melanin process) • Associated with an <i>in vitro</i> increase of PAR-2 (PAR-2 helps transfer melanin into keratinocytes) • <i>Ex vivo</i>, Chromafend is associated with an increase of the melanin in the hair cortex

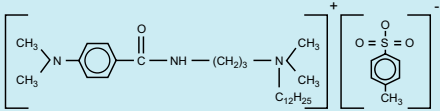
Trade Name	INCI Name	Description	Benefits
Dynagen™ biofunctional	Water (aqua) (and) Glycerin (and) Hydrolyzed Yeast Protein	A yeast extract inspired by the “Hair Keratin System™” for stronger and healthier looking hair	<ul style="list-style-type: none"> • Consumer-perceivable benefit for stronger, thicker, healthier hair feel (<i>in vivo</i>) • Associated with <i>ex vivo</i> increase in key protein markers, keratin 14, keratin 17, keratin 71, trichohyalin, all of which are associated with minimization of hair fall • Associated with <i>ex vivo</i> increase in collagen I • Associated with <i>ex vivo</i> increase in collagen IV and CD34 (both of these compounds are associated with healthy appearance of the hair)
Procataline™ biofunctional	Water (aqua) (and) Glycerin (and) Pisum Sativum (pea) Extract	A pea extract inspired by the “Hair Detox System™” for healthier, younger looking hair	<ul style="list-style-type: none"> • Associated <i>ex vivo</i> with an increase of catalase enzyme expression (a decrease in catalase activity is associated with environmental damage and hair aging) • Associated <i>ex vivo</i> with a maintenance of p63 expression in stress conditions (p63 is associated with cell regeneration and is shown to be related to hair growth) • Associated with a decrease of caspase-3 expression in stress conditions (caspases play a critical role in apoptosis) (<i>ex vivo</i>) • <i>Ex vivo</i>, Procataline is associated with reduced signs of aging induced by H₂O₂ stress, such as maintenance of the melanin in the hair cortex
Protectagen™ biofunctional	Water (aqua) (and) Glycerin (and) Hydrolyzed Rice Protein	A rice extract inspired by the “Hair Stemness System™” to mitigate stress and preserve hair growth capital	<ul style="list-style-type: none"> • Associated with an increase in stem cells markers, key to the maintenance of hair growth capital (keratin 15, α6-Integrin, β-Catenin and p63) (<i>ex vivo</i>) • May help preserve hair follicle against harmful UV damage, evidenced by the lower expression of p53 markers (<i>ex vivo</i>) • Associated <i>ex vivo</i> with an improved appearance of hair length

Note: In the U.S. hair growth and hair loss prevention claims fall under an OTC drug monograph 21CFR Part 310. Use of these claims requires a New Drug Application. Similar restrictions may exist in other parts of the world.

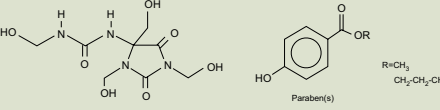
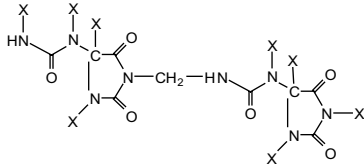
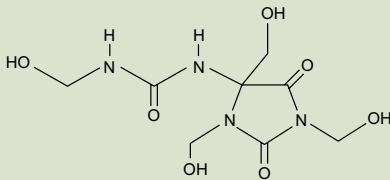
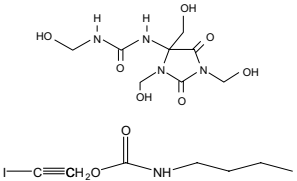
Hair care product categories							
Trade Name	INCI Name	Hair Aging at the Roots	Hair Strength	Hair Nourishment	UV Stress	Oxidative Stress	Hair Color
Capauxein™ biofunctional	Water (aqua) (and) Glycerin (and) Hydrolyzed Corn Protein	●					
Chromafend™ biofunctional	Water (aqua) (and) Glycerin (and) Hydrolyzed Linseed Extract	●					●
Dynagen™ biofunctional	Water (aqua) (and) Glycerin (and) Hydrolyzed Yeast Protein	●	●	●			
Procataline™ biofunctional	Water (aqua) (and) Glycerin (and) Pisum Sativum (pea) Extract	●				●	●
Protectagen™ biofunctional	Water (aqua) (and) Glycerin (and) Hydrolyzed Rice Protein	●			●		

Note: In the U.S. hair growth and hair loss prevention claims fall under an OTC drug monograph 21CFR Part 310. Use of these claims requires a New Drug Application. Similar restrictions may exist in other parts of the world.

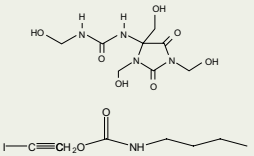
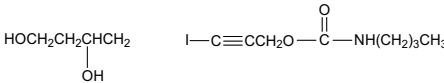
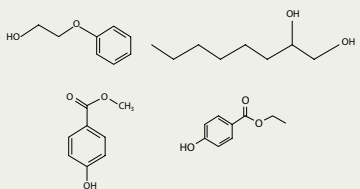
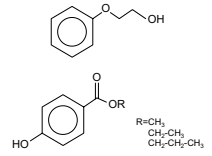
UV Protectants

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Escalol™ HP UV filter [†]	DimethylPABAmidopropyl Laurdimonium Tosylate	100% active powder		<ul style="list-style-type: none"> • Protects hair from UV light • Substantive • Conditions hair giving it body and manageability • Provides detangling and anti-static properties to hair • Easy to handle • Broad raw material compatibility 	<ul style="list-style-type: none"> • Gels • Mousses • Styling sprays • Serums • Hair treatment • Pomades, waxes, pastes • Conditioners 	0.1 – 0.5% solids
Escalol HP 610 UV filter [†]	DimethylPABAmidopropyl Laurdimonium Tosylate (and) Water (and) Propylene Glycol Stearate	Creamy waxy solid				

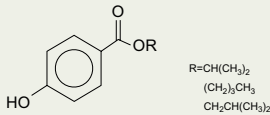
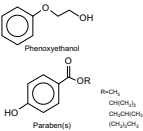
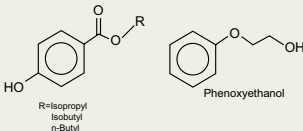
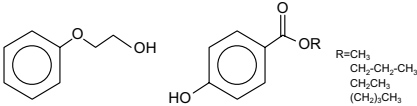
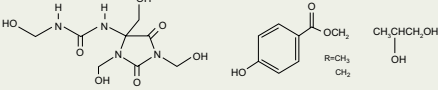
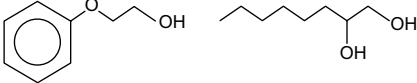
Preservatives

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Germaben™ II preservative	Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben	Clear liquid		<ul style="list-style-type: none"> • Broad-spectrum activity against gram-positive and gram-negative bacteria, yeast and mold • Effective over broad pH range: 3.0 – 7.5 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Mousses • Creams • Pomades, waxes, pastes 	0.5 – 1.0%
Germaben II-E preservative						
Germall™ 115 preservative	Imidazolidinyl Urea	White, free-flowing hygroscopic powder		<ul style="list-style-type: none"> • Very effective against gram-positive and gram-negative bacteria • Acts synergistically with other preservatives • Effective over broad pH range: 3 – 9 	<ul style="list-style-type: none"> • Shampoos • Conditioners 	0.2 – 0.6%
Germall II preservative	Diazolidinyl Urea	White, free-flowing hygroscopic powder		<ul style="list-style-type: none"> • Broad-spectrum activity against gram-positive and gram-negative bacteria • Synergistic with other preservatives • Effective over broad pH range: 3 – 9 	<ul style="list-style-type: none"> • Shampoos • Conditioners 	0.1 – 0.3%
Germall™ Plus preservative [†]	Diazolidinyl Urea (and) Iodopropynyl Butylcarbamate	White, free-flowing hygroscopic powder		<ul style="list-style-type: none"> • Broad-spectrum antimicrobial activity • Effective over broad pH range: 3 – 8 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Styling creams/lotions 	0.05 – 0.2%

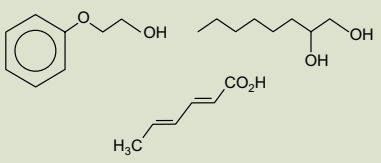
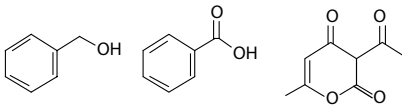
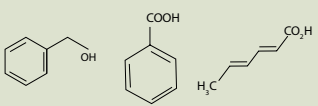
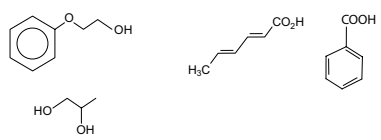
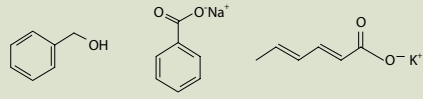
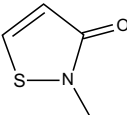
[†] For country-specific details, please contact your account manager

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Liquid Germall Plus preservative [†]	Propylene Glycol (and) Diazolidinyl Urea (and) Iodopropynyl Butylcarbamate	Clear liquid		<ul style="list-style-type: none"> Broad-spectrum antimicrobial activity Effective over broad pH range: 3 – 8 	<ul style="list-style-type: none"> Shampoos Conditioners Gels Styling creams/lotions 	0.1 – 0.5%
LiquaGard™ preservative	Butylene Glycol (and) Iodopropynyl Butylcarbamate	Liquid		<ul style="list-style-type: none"> Effective fungicide Works over wide pH range: 4 – 9 Compatible with broad range of raw materials including surfactants and proteins 	<ul style="list-style-type: none"> Shampoos Conditioners Styling creams/lotions Hair colorants Gels 	0.1 – 0.2% [†]
LiquaPar™ ME preservative (Available in EU, LA, AP)	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Caprylyl Glycol	Colorless to light brown solution		<ul style="list-style-type: none"> Provides similar efficiency to traditional paraben combinations Effective over broad pH range: 3.0 – 7.5 Global use[†] 	<ul style="list-style-type: none"> Styling creams/lotions Anhydrous systems 	0.5 – 1.0%
LiquaPar™ MEP preservative (sold as Rokonsal™ MEP preservative in EU)	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben	Clear, yellowish solution		<ul style="list-style-type: none"> Broad-spectrum activity against bacteria, yeast and mold Effective over broad pH range: 3.0 – 7.5 Global use[†] 	<ul style="list-style-type: none"> Shampoos Conditioners Anhydrous systems 	0.3 – 1.0%

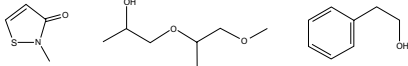
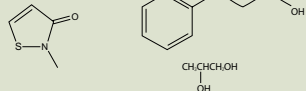
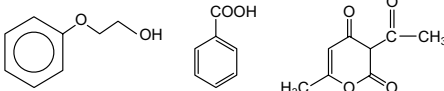
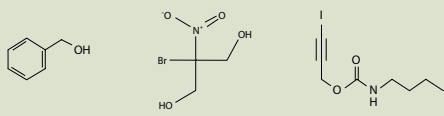
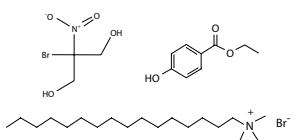
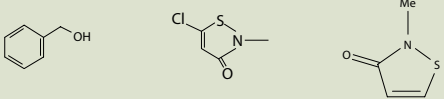
[†] For country-specific details, please contact your account manager

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
LiquaPar Oil preservative	Isopropylparaben (and) Isobutylparaben (and) Butylparaben	Clear liquid		<ul style="list-style-type: none"> • Solvent-free • Effective against gram-positive bacteria, yeast and mold • Effective over broad pH range: 3.0 – 7.5 • Global use[†] 	• Anhydrous systems	0.4 – 0.8%
LiquaPar Optima preservative	Phenoxyethanol (and) Methylparaben (and) Isopropylparaben (and) Isobutylparaben (and) Butylparaben	Clear liquid		<ul style="list-style-type: none"> • Broad-spectrum activity against bacteria, yeast and mold • Effective over broad pH range: 3.0 – 7.5 • Global use[†] 	<ul style="list-style-type: none"> • Styling creams/lotions • Anhydrous systems 	0.5 – 1.0%
LiquaPar PE preservative	Phenoxyethanol (and) Isopropylparaben (and) Isobutylparaben (and) Butylparaben	Clear liquid		<ul style="list-style-type: none"> • Broad-spectrum activity against bacteria, yeast and mold • Effective over broad pH range: 3.0 – 7.5 • Global use[†] 	<ul style="list-style-type: none"> • Styling creams/lotions • Anhydrous systems 	0.5 – 1.0%
LiquaPar PN preservative	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben (and) Butylparaben	Clear liquid		<ul style="list-style-type: none"> • Broad-spectrum activity against bacteria, yeast and mold • Effective over broad pH range: 3.0 – 7.5 • Global use[†] 	<ul style="list-style-type: none"> • Styling creams/lotions • Anhydrous systems 	0.5 – 1.0%
Optiphen 200 preservative	Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben	Clear liquid		<ul style="list-style-type: none"> • Broad-spectrum activity against gram-positive and gram-negative bacteria, yeast and mold • Effective over broad pH range: 3.0 – 7.5 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Mousses • Creams • Pomades, waxes, pastes 	0.5 – 1.0%
Optiphen™ preservative ¹	Phenoxyethanol (and) Caprylyl Glycol	Clear to pale straw liquid [EU: Colorless to light yellow solution]		<ul style="list-style-type: none"> • Broad-spectrum activity against bacteria, yeast and mold – additional fungicidal protection may be needed in difficult formulations • Effective over broad pH range: 4 – 8 • Global use[†] 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.75 – 1.5%

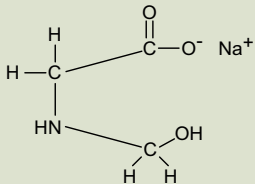
[†] For country-specific details, please contact your account manager

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Optiphen Plus preservative [†]	Phenoxyethanol (and) Caprylyl Glycol (and) Sorbic Acid	Clear to pale straw liquid [EU: Colorless to light yellow solution]		<ul style="list-style-type: none"> • Broad spectrum activity against bacteria, yeast and mold • Ideal for slightly acidic personal care products • Effective pH range up to 6.0 • Global use[†] 	<ul style="list-style-type: none"> • Mousses • Shampoos • Conditioners • Pomades, waxes, pastes 	0.75 – 1.5%
Optiphen BD preservative (Available in EU, LA, AP)	Benzyl Alcohol (and) Benzoic Acid (and) Dehydroacetic Acid	Colorless to light yellow solution		<ul style="list-style-type: none"> • Microbiostatic spectrum of activity against bacteria, mold and yeast • Effective up to pH 6.4 • Global use[†] • Nature-identical combination • Ecocert-compliant 	<ul style="list-style-type: none"> • Styling creams/lotions • Shampoos • Conditioners 	0.3 – 1.0%
Optiphen BSB-N preservative (sold as Rokonsal™ 658-N preservative in EU)	Benzyl Alcohol (and) Glycerin (and) Benzoic Acid (and) Sorbic Acid	Colorless light brown liquid		<ul style="list-style-type: none"> • Effective against gram-positive and gram-negative bacteria, yeast and mold • Effective up to pH 5.4 • Global use[†] • Nature-identical combination • Ecocert-compliant 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.3 – 1.0%
Optiphen BSP (Sold as Rokonsal BSP preservative in EU)	Phenoxyethanol (and) Propylene Glycol (and) Benzoic Acid (and) Sorbic Acid	Colorless light brown liquid		<ul style="list-style-type: none"> • Effective against gram-positive and gram-negative bacteria, yeast and mold • Effective up to pH 5.4 • Global use[†] • Nature-identical combination 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.3 – 1.0%
Optiphen BSB-W preservative (Available in EU, LA, AP)	Benzyl Alcohol (and) Water (aqua) (and) Sodium Benzoate (and) Potassium Sorbate	Colorless light brown liquid		<ul style="list-style-type: none"> • Effective against gram-positive and gram-negative bacteria, yeast and mold • Effective up to pH 5.4 • Global use[†] • Nature-identical combination • Ecocert-compliant 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.3 – 1.0%
Optiphen MIT preservative	Methylisothiazolinone and Water (aqua)	Colorless to light yellow solution		<ul style="list-style-type: none"> • Mainly effective against gram-positive and gram-negative bacteria • Effective between pH 2 – 10 • Global use[†] 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.05 – 0.1%

[†] For country-specific details, please contact your account manager

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Optiphen™ MIT Plus preservative ²	Methylisothiazolinone (and) Phenethyl Alcohol (and) PPG-2- Methyl Ether and water (Aqua)	Colorless to light yellow solution		<ul style="list-style-type: none"> • Broad-spectrum activity against bacteria, yeast and mold • Effective between pH 2 –10 • Global use[†] 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.05 – 0.2%
Optiphen MIT Ultra preservative ²	Methylisothiazolinone (and) Phenylpropanol (and) Propylene Glycol (and) Water (aqua)	Colorless to light yellow solution		<ul style="list-style-type: none"> • Broad-spectrum activity against bacteria, yeast and mold • Effective between pH 2 – 10 • Global use[†] 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Gels • Mousses • Styling creams/lotions • Pomades, waxes, pastes 	0.05 – 0.3%
Optiphen ND preservative (Sold as Rokonsal ND preservative in EU)	Phenoxyethanol (and) Benzoic Acid (and) Dehydroacetic Acid	Light yellow to yellow solution		<ul style="list-style-type: none"> • Microbiostatic spectrum of activity against bacteria, mold and yeast • Effective up to pH 6.4 • Global use[†] 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Creams • Pomades, waxes, pastes 	0.3 – 1.0%
Rokonsal™ LJ-1 preservative (Available in EU, LA, AP)	Benzyl Alcohol (and) 2-Bromo-2- Nitropropane-1,3-Diol (and) Iodopropynyl Butylcarbamate (and) Deceth-8 (and) PPG-2 Methyl Ether	Colorless to light brown solution		<ul style="list-style-type: none"> • Broad-spectrum activity against bacteria, with enhanced performance against fungi and yeast • Fast-acting • Effective up to pH 7.0 max. • Global use[†] 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Styling creams/lotions • Pomades, waxes, pastes 	0.1 – 0.4% [†]
Rokonsal SE-2 preservative (Available in EU, LA, AP)	2-Bromo-2-Nitropropane-1,3-Diol (and) Ethylparaben (and) Cetrimonium Bromide (and) PPG-2 Methyl Ether	Colorless to yellow solution		<ul style="list-style-type: none"> • Broad-spectrum activity against bacteria, fungi and yeast • Fast-acting • Effective up to pH 7.0 max. • Global use[†] 	<ul style="list-style-type: none"> • Shampoos • Conditioners • Styling creams/lotions 	0.1 – 0.3%
Rokonsal KS-4 preservative (Available in EU, LA, AP)	Benzyl Alcohol (and) Methylchlorisothiazolinone (and) Methylisothiazolinone (and) Propylene Glycol	Colorless to yellow solution		<ul style="list-style-type: none"> • Broad spectrum activity against bacteria, yeast and mold • Fast-acting • Effective up to pH 8.0 max. • Global use[†] 	<ul style="list-style-type: none"> • Shampoos • Conditioners 	0.05 – 0.12%

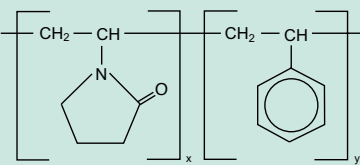
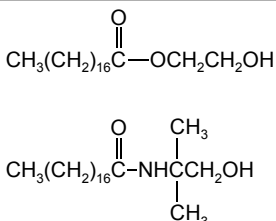
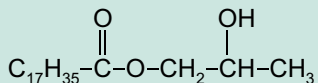
[†] For country-specific details, please contact your account manager

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Suttocide™ A preservative	Sodium Hydroxymethylglycinate	Clear to pale yellow solution		<ul style="list-style-type: none"> Broad-spectrum preservation Long history of use for efficacy Fast-acting Effective pH: 3.5 – 12 Global use† 	<ul style="list-style-type: none"> Shampoos Conditioners Gels Styling creams/lotions 	0.5 – 1.0%

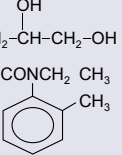
Aromatics with Antimicrobial Properties

Trade Name	INCI Name	Description/ Form	Features and Benefits	Applications	Use Levels
Conarom™ P aromatic	Phenethyl Alcohol (and) Caprylyl Glycol (and) Trideceth-8	Nature-identical fragrance additive in glycolic solution	<ul style="list-style-type: none"> Aromatic ingredient that provides broad-spectrum protection Mild rose-like aroma Complements aroma of final product Effective pH range: 4.0 – 8.0 	<ul style="list-style-type: none"> Shampoos Conditioners Gels Mousses Styling creams/lotions Pomades, waxes, pastes 	0.3 – 2.0%

Opacifiers/Pearlizers

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Antara™ 430 polymer (Sold as Plectron™ in the USA)	Styrene/VP Copolymer	Fluid, milky white emulsion; 40% solids		<ul style="list-style-type: none"> Opacifier Forms strong, light-stable films with high water resistance High acid tolerance Dye acceptor in hair color preparations 	<ul style="list-style-type: none"> Conditioners Acid rinses Permanent wave solutions Gels Hair colorants Cream developers 	Up to 1.0% solids
Cerasynt™ IP stearate ester	Glycol Stearate (and) Stearamide AMP	White to cream colored flakes		<ul style="list-style-type: none"> Imparts pearlescence and opacity 	<ul style="list-style-type: none"> Shampoos Styling creams/lotions 	Up to 2.0% solids
Cerasynt PA stearate ester	Propylene Glycol Stearate	White to cream colored flakes		<ul style="list-style-type: none"> Imparts pearlescence and opacity 	<ul style="list-style-type: none"> Shampoos Styling creams/lotions 	Up to 2.0% solids

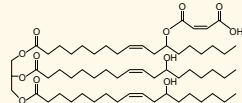
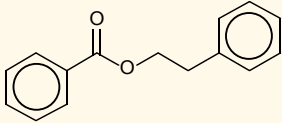
Emulsifiers

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Cerasynt™ 945 stearate ester	Glyceryl Stearate (and) Laureth-23	Flake	$\begin{array}{c} \text{C}_{17}\text{H}_{35}-\text{C}(=\text{O})-\text{O}-\text{CH}_2-\text{CH}(\text{OH})-\text{CH}_2-\text{OH} \\ \text{CH}_3\text{CH}=\text{CHCONCH}_2\text{CH}_3 \\ \text{CH}_3 \end{array}$ 	<ul style="list-style-type: none"> • Nonionic primary emulsifier • High pH tolerance • Forms opaque gels with mineral oil 	<ul style="list-style-type: none"> • Hair straighteners • Styling creams/ lotions • Conditioners 	1.0 – 3.0%
Cerasynt SD stearate ester	Glyceryl Stearate	Flake	$\text{C}_{17}\text{H}_{35}-\text{C}(=\text{O})-\text{O}-\text{CH}_2-\text{CH}(\text{OH})-\text{CH}_2-\text{OH}$	<ul style="list-style-type: none"> • Nonionic auxiliary emulsifier • Emulsion stabilizer 	<ul style="list-style-type: none"> • Styling creams/ lotions • Conditioners 	0.25 – 3.0%

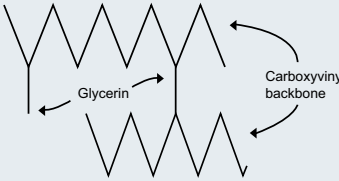
Emollients

Trade Name	INCI Name	Description/Form	Structure	Features and Benefits	Use Level	Shampoos	Shine Products	Conditioners	Styling	Hairsprays	Pomades , waxes, pastes
Esters Based on Alpha Hydroxy Acids											
Ceraphyl™ 31 ester	Lauryl Lactate	Liquid	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3\text{CHC}-\text{OCH}_2(\text{CH}_2)_{10}\text{CH}_3 \\ \\ \text{OH} \end{array}$	<ul style="list-style-type: none"> • Plasticizing and de-tackifying agent • Highly effective emolliency with lubricity • Improves product slip upon application 	0.3 - 5.0%	•	•				•
Ceraphyl 41 ester	C12-15 Alkyl Lactate	Liquid	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3\text{CHC}-\text{OR} \\ \\ \text{OH} \end{array}$ <p>R = C12-15 Mixed Alcohols</p>	<ul style="list-style-type: none"> • Effective de-tackifying agent • Spreads easily when applied • Dry initial feel with non-oily after-feel • Provides viscosity building and lather creaminess to shampoos 	0.3 - 5.0%	•					
Ceraphyl 50 ester	Myristyl Lactate	Soft solid	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3\text{CHC}-\text{OCH}_2(\text{CH}_2)_{12}\text{CH}_3 \\ \\ \text{OH} \end{array}$	<ul style="list-style-type: none"> • Imparts lubricity 	0.3 - 5.0%	•	•				•

Trade Name	INCI Name	Description/Form	Structure	Features and Benefits	Use Level	Shampoos	Shine Products	Conditioners	Styling	Hairsprays	Pomades, waxes, pastes
Light, Dry Feeling Esters											
Ceraphyl™ 140A ester	Isodecyl Oleate	Liquid	$\text{C}_8\text{H}_{17}-\overset{\text{H}_3\text{C}}{\underset{ }{\text{C}}}-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-\text{C}_7\text{H}_{17}-\text{CH}=\text{CH}-\text{C}_8\text{H}_{17}$	<ul style="list-style-type: none"> • Excellent spreadability with dry initial feel • Drier feel than Ceraphyl 140 due to branching • Very little residual after-feel 	0.3 - 5.0%		•				
Ceraphyl 230 ester	Diisopropyl Adipate	Liquid	$\begin{array}{c} \text{CH}_3 \quad \text{O} \quad \text{O} \quad \text{CH}_3 \\ \quad \parallel \quad \parallel \quad \\ \text{CH}-\text{O}-\text{C}-(\text{CH}_2)_4-\text{C}-\text{O}-\text{CH} \\ \quad \quad \quad \\ \text{CH}_3 \quad \quad \quad \text{CH}_3 \end{array}$	<ul style="list-style-type: none"> • Effective plasticizer and de-tackifier • Reduces greasiness of high-oil products • Spreads rapidly • Imparts dry initial feel with little to no residual after-feel • Coupling agent for hydroalcoholic preparations 	0.3 - 5.0%		•	•	•	•	
General Purpose Esters											
Ceraphyl 368M ester	Ethylhexyl Palmitate	Liquid	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-(\text{CH}_2)_3-\text{CH}-\text{CH}_2-\text{O}-\text{C}-(\text{CH}_2)_{14}-\text{CH}_3 \\ \\ \text{CH}_2\text{CH}_3 \end{array}$	<ul style="list-style-type: none"> • Non-occlusive • Non-oily after-feel • Suitable mineral oil replacement for beach protection formulations • No impact on absorbance curves of UV actives 	0.3 - 5.0%						•
Ceraphyl 494 ester	Isocetyl Stearate	Liquid	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-(\text{CH}_2)_{16}-\text{C}-\text{O}-\text{CH}_2-\text{CH}-\text{C}_8\text{H}_{17} \\ \\ \text{C}_6\text{H}_{13} \end{array}$	<ul style="list-style-type: none"> • All-purpose lubricant which imparts dry, emollient feel 	0.3 - 5.0%		•	•	•		•
Esters that Impart Body											
Ceraphyl 424 ester	Myristyl Myristate (and) Myristyl Laurate	Waxy solid	$\text{CH}_3-(\text{CH}_2)_{12}-\overset{\text{O}}{\parallel}{\text{C}}-\text{O}-(\text{CH}_2)_{13}-\text{CH}_3$	<ul style="list-style-type: none"> • Enhances spreadability and reduces drag upon product application • Liquifies upon contact with the body 	0.3 - 5.0%			•	•		•
Esters with Elegant Feel											
Ceraphyl 55 ester	Tridecyl Neopentanoate	Liquid	$\begin{array}{c} \text{O} \quad \text{CH}_3 \\ \parallel \quad \\ \text{H}_{27}\text{C}_{13}-\text{O}-\text{C}-\text{C}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	<ul style="list-style-type: none"> • Imparts elegant, light, non-oily feel 	0.3 - 5.0%						•
Ceraphyl 375 ester	Isostearyl Neopen-tanoate	Liquid	$\begin{array}{c} \text{O} \quad \text{CH}_3 \\ \parallel \quad \\ \text{C}_8\text{H}_{17}-\text{CH}_2-\text{HC}-\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{CH}_3 \\ \quad \quad \quad \\ \text{C}_6\text{H}_{13}-\text{CH}_2 \quad \text{CH}_3 \end{array}$	<ul style="list-style-type: none"> • Improves product spreadability and playtime • Imparts elegant, light, non-oily feel 	0.3 - 5.0%						•

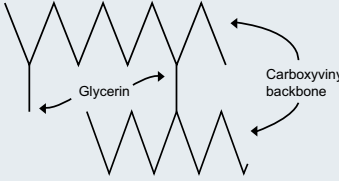
Trade Name	INCI Name	Description/Form	Structure	Features and Benefits	Use Level	Shampoos	Shine Products	Conditioners	Styling	Hairsprays	Pomades , waxes, pastes
Ceraphyl™ ODS ester	Octyldodecyl Stearate	Liquid	$\text{CH}_3(\text{CH}_2)_{16}\overset{\text{O}}{\parallel}\text{C}-\text{OCH}_2\underset{\text{CH}_2(\text{CH}_2)_6\text{CH}_3}{\underset{ }{\text{CH}}}(\text{CH}_2)_9\text{CH}_3$	<ul style="list-style-type: none"> Imparts dry initial feel, luxurious mid-feel with a silky after-feel Enhances product spreadability Exceptional powder binding properties when blended with Ceraphyl 847 (1:1) 	0.3 - 5.0%		●	●			●
Esters for Maximum After-Feel											
Ceraphyl 791 ester (complies to organic certifications, like Ecocert)	Isocetyl Stearoyl Stearate	Liquid	$\text{C}_{17}\text{H}_{35}-\overset{\text{O}}{\parallel}\text{C}-\text{O}-\underset{\text{C}_8\text{H}_{17}}{\underset{ }{\text{CH}}}-(\text{CH}_2)_{10}-\overset{\text{O}}{\parallel}\text{C}-\text{O}-\underset{\text{C}_8\text{H}_{17}}{\underset{ }{\text{CH}}}-\text{CH}_2-\text{CH}-\text{C}_6\text{H}_{13}$	<ul style="list-style-type: none"> Imparts dry initial feel with lubricious after-feel Long-lasting emollient 	0.3 - 5.0%						●
Ceraphyl 847 ester (complies to organic certifications, like Ecocert)	Octyldodecyl Stearoyl Stearate	Liquid	$\underset{\text{C}_{10}\text{H}_{21}}{\underset{ }{\text{CH}}}-\underset{\text{C}_8\text{H}_{17}}{\underset{ }{\text{CH}}}-\overset{\text{O}}{\parallel}\text{C}-(\text{CH}_2)_{10}-\underset{\text{C}_6\text{H}_{13}}{\underset{ }{\text{CH}}}-\overset{\text{O}}{\parallel}\text{C}-\text{O}-\text{C}_{17}\text{H}_{35}$	<ul style="list-style-type: none"> Offers dry initial feel with long-lasting cushiony, rich after-feel Exceptional pigment dispersing and binding properties when blended with Ceraphyl ODS (1:1) 	0.3 - 5.0%			●			●
Esters with Natural Appeal											
Orchid™ Complex OS	Caprylic/Capric Triglyceride (and) Cymbidium Grandiflorum Flower Extract	Liquid	$\begin{array}{c} \text{CH}_2-\text{OCR} \\ \\ \text{CH}-\text{OCR}^1 \\ \\ \text{CH}_2-\text{OCR}^{11} \end{array} \quad \text{R} = \text{Caprylic/Capric Acid}$	<ul style="list-style-type: none"> Enhances product spreadability Offers smooth, light, silky after-feel 	0.3 - 5.0%						●
Esters for Rinse-Off Products											
Ceraphyl RMT ester	Castoryl Maleate	Liquid		<ul style="list-style-type: none"> Offers clinically-proven moisturization in rinse-off products 	0.3 - 5.0%	●					
Esters with Solubilizing Capability											
X-Tend™ 226 ester	Phenethyl Benzoate	Liquid		<ul style="list-style-type: none"> High solubilizing capacity Shine enhancement Excellent skin feel Increases the critical wavelength and the UVA/UVB ratio Boosts polymeric shine in hairsprays 	0.3 - 5.0%					●	●

Lubricants

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels	
Lubrajel™** II XD hydrogel	Glycerin and Glyceryl Polyacrylate	Clear gels	 <p>Theoretical structure: Glyceryl Acetate/Acrylic Acid Copolymer</p>	<ul style="list-style-type: none">• Superior moisturization• Imparts an inviting after-feel and slip• Excellent lubricity, spreadability and emolliency• Broad formulation compatibility and long shelf life• Good auxiliary thickening, suspending power and viscosity enhancement• Water-soluble• Cold-processable	• Hair treatment gels	2 – 25%	
Lubrajel** CG hydrogel	Glycerin and Glyceryl Acrylate/Acrylic Acid Co-polymer and Propylene Glycol					5 – 25%	
Lubrajel** DV hydrogel	Glycerin and Glyceryl Acrylate/Acrylic Acid Co-polymer and Propylene Glycol					5 – 25%	
Lubrajel** MS hydrogel	Glycerin and Glyceryl Acrylate/Acrylic Acid Co-polymer and Propylene Glycol					2 – 25%	
Lubrajel** Natural skin conditioning gel	Glycerin, Beta-Glucan, Algin, Xanthan Gum	Very pale yellow viscous gel				<ul style="list-style-type: none">• Multifunctional ingredient providing sensory and stabilization benefits• Consumer pleasing aesthetics with a natural ingredient• Conforms to Ecocert natural and organic cosmetic standard	0.3 – 50%
Lubrajel** NP hydrogel	Glycerin and Glyceryl Acrylate/Acrylic Acid Co-polymer						2 – 25%
Lubrajel** Oil hydrogel	Glycerin and Glyceryl Acrylate/Acrylic Acid Co-polymer and Propylene Glycol and PVM/MA Copolymer						0.2 – 5%
Lubrajel** PF hydrogel (Paraben-free version of Lubrajel CG)	Glycerin and Glyceryl Acrylate/Acrylic Acid Co-polymer						5 – 25%
Lubrajel** TW hydrogel	Propylene Glycol and Glycerin and Glyceryl Acrylate/Acrylic Acid Co-polymer			2 – 25%			


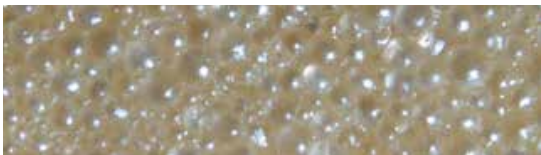
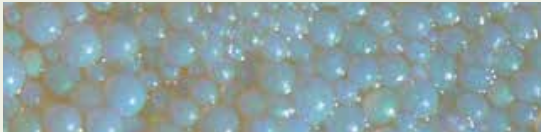



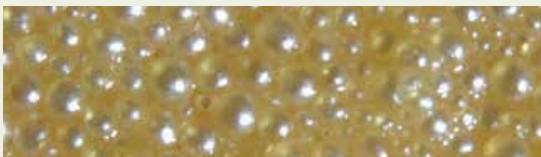
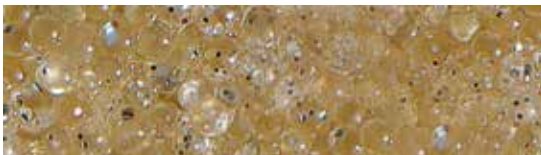
*Also available in paraben-free version








**Lubrajel and Lubrasil are registered trademarks of United-Guardian, Inc.

Trade Name	INCI Name	Description/ Form	Structure	Features and Benefits	Applications	Use Levels
Lubrajel ^{TM**} WA hydrogel	Propylene Glycol (and) Glycerin (and) Glyceryl Acrylate/Acrylic Acid Copolymer (and) Poloxamer 184	Clear gels	 <p>Theoretical structure: Glyceryl Acetate/Acrylic Acid Copolymer</p>	<ul style="list-style-type: none"> • Superior moisturization • Imparts an inviting after-feel and slip • Excellent lubricity, spreadability and emolliency • Broad formulation compatibility and long shelf life • Good auxiliary thickening, suspending power and viscosity enhancement • Water-soluble • Cold-processable 	• Hair treatment gels	25 – 25%
Lubrasil ^{TM**} microemulsion	Glycerin and Glyceryl Acrylate/Acrylic Acid Copolymer and Polysorbate 20 and Cyclopentasiloxane and Propylene Glycol and Dimethiconol					5 – 25%
Lubrasil ^{**} II DM microemulsion	Glycerin (and) Glyceryl Acrylate/Acrylic Acid Copolymer (and) Laureth-23 (and) Dimethicone					2.5 – 10%
Lubrasil ^{**} II SB microemulsion	Glycerin (and) Glyceryl Acrylate/Acrylic Acid Copolymer (and) Laureth-23 (and) Cyclopentasiloxane (and) Dimethiconol					3 – 15%

^{**}Lubrajel and Lubrasil are registered trademarks of United-Guardian, Inc.

Encapsulates

Trade Name	INCI Name	Form	Product Image	Average Size	Wall Type
Captivates™ HC0001 encapsulate	Aqua (Water) (and) Butyrospermum Parkii (Shea Butter) (and) CI 77007 Ultramarines (and) Gelatin (and) Acacia Senegal Gum (and) CI 77891 (Titanium Dioxide) (and) Diazolidinyl Urea	Blue beads in clear/hazy liquid		500-750 microns	Thin
Captivates HC0002 encapsulate	Paraffinum Liquidum (Mineral Oil) (and) Aqua (Water) (and) Gelatin (and) Acacia Senegal Gum (and) Tocopheryl Acetate (and) Prunus Persica (Peach) Kernel Oil (and) Mica (and) CI 77891 (Titanium Dioxide) (and) Diazolidinyl Urea	Silver beads in clear/hazy liquid		1250 microns	Thick
Captivates HC0003 encapsulate (not available in NA)	Aqua (Water) (and) Cholesteryl Oleyl Carbonate (and) Cholesteryl Nonanoate (and) Cholesteryl Chloride (and) Cholesteryl Benzoate (and) Gelatin (and) Acacia Senegal Gum (and) Diazolidinyl Urea	Green beads in clear/hazy liquid		1000 microns	Thick
Captivates HC0004 encapsulate	Aqua (Water) (and) Helianthus Annuus (Sunflower) Seed Oil (and) Mentha Piperita (Peppermint) Oil (and) Gelatin (and) Acacia Senegal Gum (and) Mica (and) CI 77891 (Titanium Dioxide)	Silver beads in clear liquid		750-1000 microns	Thin
Captivates HC0005 encapsulate	Dimethicone (and) Aqua (Water) (and) Gelatin (and) Acacia Senegal Gum (and) Mica (and) CI 77891 (Titanium Dioxide) (and) CI 73360 (Red 30) (and) Tin Oxide (and) Xanthan Gum (and) Phenoxyethanol (and) Benzoic Acid (and) Dehydroacetic Acid	Pink beads in clear/hazy liquid		1250-1500 microns	Thick
Captivates HC0006 encapsulate	Aqua (Water) (and) Butyrospermum Parkii (Shea Butter) (and) Gelatin (and) Acacia Senegal Gum (and) Polyester 3 (and) CI 45370 (Orange 5)	Orange beads in clear/hazy liquid		1250 microns	Thin
Captivates HC0007 encapsulate	Simmondsia Chinensis (Jojoba) Oil (and) Aqua (Water) (and) Gelatin (and) Acacia Senegal Gum (and) Tocopheryl Acetate (and) Mica (and) CI 77891 (Titanium Dioxide) (and) CI 47000 (Yellow 11) (and) Xanthan Gum (and) Phenoxyethanol (and) Benzoic Acid (and) Dehydroacetic Acid	Yellow beads in clear liquid		1250-1500 microns	Thick
Captivates HC0008 encapsulate (not available in NA)	Dimethicone (and) Aqua (Water) (and) Gelatin (and) Acacia Senegal Gum (and) Polyethylene Terephthalate/Acrylates Copolymer (and) Xanthan Gum (and) Phenoxyethanol (and) Benzoic Acid (and) Dehydroxyacetic Acid	Glittery beads in clear/hazy liquid		1250-1500 microns	Thick

Trade Name	INCI Name	Form	Product Image	Average Size	Wall Type
Captivates™ HC0009 encapsulate	Paraffinum Liquidum (Mineral Oil) (and) Aqua (Water) (and) Gelatin (and) Acacia Senegal Gum (and) Propylene Glycol (and) Ethylhexyl Methoxycinnamate (and) CI 77891 (Titanium Dioxide) (and) Mica (and) Tocopheryl Acetate (and) CI 77288 (Chromium Oxide Green) (and) CI 61565 (Green 6) (and) CI 77510 (Ferric Ferrocyanide) (and) Phenoxyethanol (and) Methylparaben	Blue/green beads in clear liquid		1500 microns	Thick
Captivates HC0012 encapsulate	Aqua (Water) (and) Butyrospermum Parkii (Shea Butter) (and) Gelatin (and) Acacia Senegal Gum (and) Mica (and) Helianthus Annuus (Sunflower) Seed Oil (and) CI 77891 (Titanium Dioxide) (and) Phenoxyethanol (and) Xanthan Gum (and) CI 73360 (Red 30) (and) CI 75470 (Carmine) (and) Benzoic Acid (and) Dehydroacetic Acid	Red beads in clear gel		1250 microns	Thin
Captivates GL 7661 encapsulate	Mixture	Pink beads in clear liquid		approx. 1200 microns	Alginate/Agar
Captivates GL 7615 encapsulate	Mixture	Gold beads in clear liquid		approx. 1300 microns	Carrageenan/ Agar
Captivates GL 7542 encapsulate	Mixture	Green beads in clear liquid		approx. 1000 microns	Alginate/Agar
Captivates GL 7539 encapsulate	Mixture	Red beads in clear liquid		approx. 1000 microns	Alginate/ Chitosan
Captivates GL 7339 encapsulate	Mixture	Green beads in clear liquid		approx. 700 microns	Agar

All ISP Captivates HC and GL can be customized in terms of size, color and ingredients



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Footnotes

- 1 - Patented technology
- 2 - Patent pending