hair care

ingredients portfolio
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## Fixatives and Styling Polymers

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</table>
| Advantage™ LC-A polymer  | Vinyl Caprolactam/VP/Dimethylaminoethyl Methacrylate Copolymer            | 37% solids in ethanol | ![Structure](image) | • 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          | 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 | Powder | ![Structure](image) | • 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    | Gels  
Mousses  
Hairsprays  
Pomades, waxes, pastes | 0.5–4.0% solids |
| Advantage S polymer       | Vinyl Caprolactam/VP/Dimethylaminoethyl Methacrylate Copolymer             | 30% aqueous solution | ![Structure](image) | • Medium hold  
• Excellent high humidity curl retention  
• Good spray aesthetics with fast dry time | Aerosol hairsprays  
Non-aerosol hairsprays | 0.5–5.0% solids |
| Advantage S Solution polymer | VA/Butyl Maleate/isobornyl Acrylate Copolymer                     | Clear pale yellow solution | ![Structure](image) | • Medium hold  
• Excellent high humidity curl retention  
• Good spray aesthetics with fast dry time | Aerosol hairsprays  
Non-aerosol hairsprays | 0.5–5.0% solids |
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</table>
| Advantage™ 4910 polymer | Octylacrylamide/Acrylates/Butylaminoethyl Methacrylate Copolymer | Powder           | ![Structure](image) | - Excellent high humidity curl retention  
- Exceptional stiffness  
- Long-lasting hold  
- High propellant tolerance  
- Works in all VOC systems | Aerosol hairsprays, non-aerosol hairsprays | 0.5–5.0% solids |
| Aquaflex™ FX-64 polymer | Isobutylene/Ethylmaleimide/Hydroxyethyl Maleimide Copolymer | 40% solids in hydroalcoholic solution | ![Structure](image) | - Provides superior “stiff” hold  
- Good curl memory  
- Excellent high humidity curl retention  
- Shine  
- Manageability  
- No neutralization required | Aerosol hairsprays, non-aerosol hairsprays mousses, styling creams/lotions, pomades, waxes, pastes | Non-aerosol sprays: 0.25–7% solids |
| Aquaflex SF-40 polymer | VP/Vinyl Caprolactam/DMAPA Acrylates Copolymer | 40% solids in ethanol | ![Structure](image) | - Can be formulated at all VOC levels  
- Good sprayability  
- Excellent high humidity curl retention  
- Low-tack  
- High propellant compatibility | Aerosol hairsprays, non-aerosol hairsprays mousses, styling creams/lotions, pomades, waxes, pastes | Non-aerosol sprays: 0.5–5.0% solids |
| Aquaflex XL-30 polymer | Polyimide-1 | 30% aqueous solution | ![Structure](image) | - 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 | Gels, spray gels, spray mousses, styling creams/lotions, pomades, waxes, pastes, shampoos, conditioners, hair treatments | 0.25–4.0% solids |
| AquaStyle™ 300 polymer† | Polyquaternium-69 | 30% solids in hydroalcoholic solution | ![Structure](image) | - 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) | Gels, mousses, styling creams/lotions, pomades, waxes, pastes, spray sprays (non-aerosol) | 0.25–5.0% solids |
| AquaStyle 300 AF polymer† | Acrylates Copolymer (and) Water | Milky, white to off-white liquid | ![Structure](image) | - 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 | Crystal clear gels, cream gels, spray gels, styling sprays, creams and lotions, waxes and pomades, mousses | 0.5–2.0% solids |
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<tr>
<td>Copolymer 845</td>
<td>VP/Dimethylaminoethyl Methacrylate Copolymer</td>
<td>20% aqueous solution; aids wet and dry combing, imparts smoothness, gloss, body, and silky feel to hair</td>
<td>Gels, mousses, blow-dry conditioners, styling creams/lotions, pomades, waxes, pastes, conditioning rinses, styling sprays, low-VOC sprays</td>
<td>0.2-4.0% solids</td>
</tr>
<tr>
<td>Copolymer 845 O (Optiphen™ Preserved)</td>
<td></td>
<td>20% aqueous solution; copolymer 845 is compatible with carbomer and can be formulated into clear gels</td>
<td>Mousses, waxes, pastes</td>
<td>0.2-4.0% solids</td>
</tr>
<tr>
<td>Copolymer 937</td>
<td></td>
<td>20% aqueous solution; superior “natural feel” hold at low solids level</td>
<td>Hairsprays, gels, mousses, styling creams/lotions, pomades, waxes, pastes, conditioning rinses, styling sprays, low-VOC sprays</td>
<td>0.5-4.0% solids</td>
</tr>
<tr>
<td>Copolymer 958</td>
<td></td>
<td>50% solids in ethanol; excellent propellant compatibility</td>
<td>Mousses, waxes, pastes, leave-in conditioning lotions</td>
<td>0.25-8.0% solids</td>
</tr>
<tr>
<td>Gaffix™ VC-713 polymer (sold as Copolymer VC-713 in EU)</td>
<td>Vinyl Caprolactam/VP/Dimethylaminomethyl Methacrylate Copolymer</td>
<td>37% solids in ethanol; builds body, enhances hair luster, enhances manageability, smooth skin application with desirable after-feel</td>
<td>Mousses, gels, styling sprays, pomades, waxes, pastes, leave-in conditioning lotions, styling sprays, low-VOC sprays</td>
<td>0.25-4.0% solids</td>
</tr>
<tr>
<td>Gafquat™ 440 polymer</td>
<td>Flowable 30% alcoholic solution; 100,000 avg. MW</td>
<td>Good wet and dry combing, good curl retention, clear, non-tacky films, builds body, enhances hair luster, enhances manageability, easy shampoo removability, improves foam aesthetics, smooth skin application with desirable after-feel</td>
<td>Mousses, gels, styling sprays, pomades, waxes, pastes, leave-in conditioning lotions, styling sprays, low-VOC sprays</td>
<td>0.25-8.0% solids</td>
</tr>
<tr>
<td>Gafquat 755N polymer</td>
<td>Polyquaternium-11</td>
<td>Highly viscous 20% aqueous solution; 1,000,000 avg. MW; 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, 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)</td>
<td>Mousses, gels, styling sprays, pomades, waxes, pastes, shampoos, conditioning rinses, leave-in conditioning lotions, styling sprays</td>
<td>0.25-4.0% solids</td>
</tr>
<tr>
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<td>structure</td>
<td>features and benefits</td>
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</table>
| Gafquat™ HS-100 polymer     | Polyquaternium-28              | 20% aqueous solution | ![Structure](image1.png) | - 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) | Shampoos, conditioners, styling creams/lotions, gels, mousses, pomades, waxes, pastes, styling sprays, permanent wave solutions | Shampoos/conditioners: up to 1.0% solids  
Styling: 2.0–4.0% solids |
| Gantrez™ A-425 polymer      | Butyl Ester of PVM/MA Copolymer | 50% solids in ethanol | ![Structure](image2.png) | - high hold  
- excellent shine  
- durability  
- tack-free  
- good style retention  
- humidity resistant  
- good propellant compatibility  
- pigment dispersant  
- emulsion stabilizer | 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 | ![Structure](image3.png) | - 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 | Aerosol hairsprays, non-aerosol hairsprays, mousses, pomades, waxes, pastes | 0.5–8.0% solids |
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| Primaflo™ HP22 polymer solution | Hydroxypropylcellulose Solution |                 | ![structure](image) | ○ soft, flexible films  
○ high strength films  
○ non-tacky films | ○ low- and no-VOC hair styling gels, mousses and sprays | 2.0–5.0% solids |
| PVP K-15         | PVP 100% powder; 8000 avg. MW in Daltons | 100% powder; 8000 avg. MW in Daltons | ![structure](image) | ○ strong, stiff hold  
○ stabilizes emulsions, dispersions and suspensions  
○ foam stabilizer  
○ excellent compatibility with acrylate thickeners  
○ shine | ○ 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 | PVP 30% solution; 8000 avg. MW in Daltons | 30% solution; 8000 avg. MW in Daltons | ![structure](image) | ○ strong, stiff hold  
○ stabilizes emulsions, dispersions and suspensions  
○ foam stabilizer  
○ excellent compatibility with acrylate thickeners  
○ shine | ○ 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-30         | PVP 100% powder; 60,000 avg. MW in Daltons | 100% powder; 60,000 avg. MW in Daltons | ![structure](image) | ○ strong, stiff hold  
○ stabilizes emulsions, dispersions and suspensions  
○ foam stabilizer  
○ excellent compatibility with acrylate thickeners  
○ shine | ○ 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-30 solution | PVP 30% solution; 60,000 avg. MW in Daltons | 30% solution; 60,000 avg. MW in Daltons | ![structure](image) | ○ strong, stiff hold  
○ stabilizes emulsions, dispersions and suspensions  
○ foam stabilizer  
○ excellent compatibility with acrylate thickeners  
○ shine | ○ 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-60         | PVP 100% powder; 400,000 avg. MW in Daltons | 45% solution; 400,000 avg. MW in Daltons | ![structure](image) | ○ strong, stiff hold  
○ stabilizes emulsions, dispersions and suspensions  
○ foam stabilizer  
○ excellent compatibility with acrylate thickeners  
○ shine | ○ 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-60 solution | PVP 20% solution; 400,000 avg. MW in Daltons | 100% powder; 1,300,000 avg. MW in Daltons | ![structure](image) | ○ strong, stiff hold  
○ stabilizes emulsions, dispersions and suspensions  
○ foam stabilizer  
○ excellent compatibility with acrylate thickeners  
○ shine | ○ gels  
○ mousses  
○ styling creams/lotions  
○ hair colorants  
○ pomades, waxes, pastes  
○ in addition, PVP K-15 and PVP K-30 can be used in hairsprays | 0.25–3.0% solids |
| PVP K-90         | PVP 100% powder; 1,300,000 avg. MW in Daltons | 100% powder; 1,300,000 avg. MW in Daltons | ![structure](image) | ○ strong, stiff hold  
○ stabilizes emulsions, dispersions and suspensions  
○ foam stabilizer  
○ excellent compatibility with acrylate thickeners  
○ shine | ○ gels  
○ mousses  
○ styling creams/lotions  
○ hair colorants  
○ pomades, waxes, pastes  
○ in addition, PVP K-15 and PVP K-30 can be used in hairsprays | 0.25–3.0% solids |
| PVP K-90 solution | PVP 20% solution; 1,300,000 avg. MW in Daltons | 100% powder; 3,000,000 avg. MW in Daltons | ![structure](image) | ○ strong, stiff hold  
○ stabilizes emulsions, dispersions and suspensions  
○ foam stabilizer  
○ excellent compatibility with acrylate thickeners  
○ shine | ○ gels  
○ mousses  
○ styling creams/lotions  
○ hair colorants  
○ pomades, waxes, pastes  
○ in addition, PVP K-15 and PVP K-30 can be used in hairsprays | 0.25–3.0% solids |

‡ Ratio (VP/VA)
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<tr>
<td>PVP/VA S-630</td>
<td></td>
<td>White powder</td>
<td></td>
<td></td>
<td>gels, mousses, styling creams/lotions, hair colorants, pomades, waxes, pastes</td>
<td></td>
</tr>
<tr>
<td>PVP/VA E-335</td>
<td>PVP/VA I-335</td>
<td>50% solution in ethanol (E) or isopropanol (I), (30/70)</td>
<td></td>
<td>strong, stiff hold, enhanced high humidity curl retention, good propellant compatibility</td>
<td>aerosol hairsprays, non-aerosol hairsprays</td>
<td></td>
</tr>
<tr>
<td>PVP/VA E-535</td>
<td>PVP/VA I-535</td>
<td>50% solution in ethanol (E) or isopropanol (I), (50/50)</td>
<td>[CH₂=CH]</td>
<td></td>
<td>hydroalcoholic styling lotions and hair thickeners</td>
<td></td>
</tr>
<tr>
<td>PVP/VA E-635</td>
<td>PVP/VA W-635</td>
<td>50% solution in water (W) or ethanol (E) (60/40)</td>
<td>[CH₂=CH] O C=O</td>
<td></td>
<td>alcohol-free formulas (W), gels, mousses, styling creams/lotions, hair colorants, pomades, waxes, pastes</td>
<td>0.5–6.0% solids</td>
</tr>
<tr>
<td>PVP/VA E-735</td>
<td>PVP/VA I-735</td>
<td>50% solution in water (W), ethanol (E) or isopropanol (I) (70/30)</td>
<td>[CH₂=CH] O C=O</td>
<td></td>
<td>“wet look” gels, water-based aerosol mousses, (E) and (I) used in anhydrous aerosols, (W) in alcohol-free formulas, gels, mousses, styling creams/lotions, hair colorants, pomades, waxes, pastes</td>
<td></td>
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† Ratio (VP/VA)
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</table>
| Style Fusion™ complex 1 | Polyquaternium-28 (and) PVM/MA Copolymer | 10% solid in water | Polyquaternium-28 | - split end mending with mechanical durability  
- cuticle smoothing  
- promotes shine  
- contributes to styling: fiber alignment  
- thermal protection | leave in conditioners  
styling creams and lotions  
rinse off conditioner  
cream gels  
mousses  
serums | 10–20% |
| Style Fusion™ complex 2 | Polyquaternium-11 (and) Polyquaternium-55 (and) PVM/MA Copolymer | 10% solid in water | Polyquaternium-11  
Polyquaternium-55  
PVM/MA Copolymer | - durable smoothing with improved wash resistance enhanced through heat activation  
- frizz control  
- improved manageability and fiber alignment  
- delivers enhanced shine  
- conditioned smooth hair feel  
- provides hold and curl retention under high humidity conditions | creams and lotions  
leave in and rinse off conditioner  
cream gels  
mousses  
serums  
sprays (non-aerosol) | 10–20% |
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</table>
| Style Fusion™ complex 3 | (proposed) Guar Hydroxypropyltrimonium Chloride (and) Acrylates Copolymer | 5% solid in water | ![Structure](image) | - long lasting high humidity curl retention  
- good wet and dry detangling and combing  
- improved sustainability profile  
- improved manageability and frizz reduction  
- provides natural hold with curl definition  
- very smooth hair feel  
- improves foam quality in mousses | - mousses  
- combing creams  
- serums and lotions  
- cream gels | 30–60% |
| Styleze CC-10 polymer¹ | VP/DMAPA Acrylates Copolymer | 10% aqueous solution | ![Structure](image) | - 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) | - gels  
- mousses  
- styling creams/lotions  
- pomades, waxes, pastes  
- styling sprays (non-aerosol)  
- shampoos  
- conditioners | Styling: 0.25–2.0% solids  
Shampoos/Conditioners: 0.5–1.0% solids |
| Styleze™ W-10 polymer¹ | Polyquaternium-55 | 10% aqueous solution | ![Structure](image) | - 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) | - gels  
- mousses  
- styling creams/lotions  
- leave-in conditioners  
- pomades, waxes, pastes  
- styling sprays (non-aerosol)  
- shampoos  
- conditioners | Gels, Mousses, Lotions: 0.25–2.0% solids  
Shampoos/Conditioners: 0.25–1.0% solids |
| Styleze W-17 polymer¹ | Polyquaternium-55 | 17% aqueous solution | ![Structure](image) | - 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 | - styling creams/lotions  
- gels  
- mousses  
- lotions | 4.0% solids (13.5% as is) |
| Styleze XT3 polymer¹ | Water (and) PVM/MA Copolymer (and) Caprylyl Glycol | 20% aqueous solution | ![Structure](image) | - 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, Stabileze SM) | - gels  
- mousses  
- styling creams/lotions  
- pomades, waxes, pastes  
- styling sprays (non-aerosol)  
- shampoos  
- conditioners | - mousses  
- styling sprays (non-aerosol)  
- gels  
- shampoos  
- conditioners | 30–50% |
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| AquaCat™ 518 cationic solution | Guar Hydroxypropyltrimonium Chloride | Clear solution         | ![Structure](image) | - light conditioning  
- volumizing                                                                 | - volumizing shampoos  
- daily shampoos               | 0.2-0.4% |
| AquaCat PF 618 cationic solution | | | ![Structure](image) | - paraben-free  
- light conditioning  
- volumizing | - shampoos  
- conditioners  
- leave on treatments | 1.0-5.0% |
| ChromoHance™ 113 conditioning polymer | Polyquaternium 113 | Clear solution, 20% active | ![Structure](image) | - provide consumer perceivable color protection  
- compatible with most surfactant systems | - shampoos  
- conditioners  
- leave on treatments | 1.0-5.0% |
| ClearHance™ C conditioning polymer | Cassia Hydroxypropyltrimonium chloride | White powder | ![Structure](image) | - superior conditioning  
- good deposition of silicon emulsions and other oils  
- outstanding clarity in clear shampoos and body washes  
- naturally derived  
- compatible in all surfactant systems  
- low in use cost  
- provides a luxurious creamy lather and texture and slip.  
- easy to process, no pH adjustment required  
- low odor and color | - shampoos  
- conditioners  
- body washes  
- shower gels  
- liquid hand soaps | 0.1-0.5% |
| Conditioneze™ 22 cationic solution | Polyquaternium-22 | Clear solution | ![Structure](image) | - 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 | - 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 | ![Structure](image) | - 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 | - conditioners  
- hair masks  
- rheology | 2.0-4.0% |
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</thead>
</table>
| Conditioneze™ NT-20 cationic solution | Polyquaternium-28 | 20% aqueous solution | ![Structure](image1) | ◦ excellent wet and dry combing  
◦ builds creamy, rich lather  
◦ imparts body and manageability without build-up  
◦ cold processable | shampoo, conditioner, styling creams/lotions, gels, mousses, pomades, waxes, pastes, permanent wave solutions | Shampoos/Conditioners: 0.25–1.0% solids  
Styling: 2.0–4.0% solids |
| Conditioneze™ NT-20-0 cationic solution (Optiphen™ preserved) | FiberHance™ BM solution | Hydroxypropyl Gluconamide (and) Hydroxypropyl Ammonium Glucanate | ![Structure](image2) | ◦ provides inner strengthening of hair fiber  
◦ internal bond creation  
◦ improves manageability | shampoo | 1% solids |
| FiberHance™ BM solution | Gafquat™ HSi cationic solution | Polyquaternium-28 (and) Dimethicone | ![Structure](image3) | ◦ 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 | shampoo, conditioner, conditioning treatments, gels, mousses, pomades, waxes, pastes | Shampoos/Conditioners: 1.0–2.0% solids  
Styling: 0.2–1.0% solids |
| N-DurHance™ A-1000 conditioning polymer | Polyacrylamidopropyltrimonium Chloride | Clear solution | ![Structure](image4) | ◦ high conditioning durability  
◦ no build-up  
◦ preservative free  
◦ compatible with cationics and nonionics | leave-on and rinse-off conditioners, hair masks, conditioning sprays, shampoo | 0.1–1.0% solids |
| N-DurHance AA-2000 conditioning polymer | Polyacrylamidopropyltrimonium chloride/acylamide | Clear solution, 20% active | ![Structure](image5) | ◦ helps to revert hydrophobicity to original virgin state  
◦ durable long lasting conditioning  
◦ no build up  
◦ compatible with cationic, non-ionic and some anionic surfactants | shampoo, rinse-off and leave-on conditioners, hair masks, conditioning sprays | 0.1–1.0% solids |
| N-Hance SP-100 polymer | Acrylamidopropyl Trimonium Chloride/Acrylamide Copolymer | Powder | ![Structure](image6) | ◦ 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.) | ethnic hair products, highly damaged/bleached/treated hair, anti-dandruff shampoos, silicone deposition | 0.1–0.2% |
<p>| N-Hance 4572 conditioning polymer | Guar Hydroxypropyltrimonium Chloride and Acrylamidopropyl Trimonium Chloride/Acrylamide Copolymer |  | <img src="image7" alt="Structure" /> | | shampoo, conditioner | 0.15–0.25% |</p>
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<th>use levels</th>
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<tbody>
<tr>
<td>N-Hance™ BF17</td>
<td>cationic guar</td>
<td></td>
<td></td>
<td>o high conditioning, wet and dry combing</td>
<td>o shampoos/2-in-1 shampoos for ethnic hair</td>
<td>0.2–0.4%</td>
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<tr>
<td></td>
<td>cationic guar</td>
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<td>o active deposition aid</td>
<td>o highly damaged/bleached/treated hair</td>
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<td>o efficient silicone deposition</td>
<td>o silicone deposition</td>
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<td>o softer hair feel</td>
<td>o anti-dandruff shampoos</td>
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<td></td>
<td>N-Hance 3215</td>
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<td>0.2–0.4%</td>
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<td>cationic guar</td>
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<tr>
<td></td>
<td>Guar Hydroxypropyltrimonium Chloride</td>
<td>Powder</td>
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<td>N-Hance 3196</td>
<td>cationic guar</td>
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<td></td>
<td>N-Hance™ BF13</td>
<td>cationic guar</td>
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<tr>
<td></td>
<td>N-Hance CG13</td>
<td>cationic guar</td>
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<td>N-Hance CCG45</td>
<td>cationic guar</td>
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<tr>
<td>N-Hance™ 3000/3299 cationic guar</td>
<td>Guar Hydroxypropyltrimonium Chloride</td>
<td>Powder</td>
<td><img src="image1" alt="structure" /></td>
<td>o low viscosity o low conditioning</td>
<td>o light conditioning shampoos o volumizing shampoos</td>
<td>0.2–0.4%</td>
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<tr>
<td>N-Hance C261 cationic guar</td>
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<tr>
<td>N-Hance C261N cationic guar</td>
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<td>0.2–0.4%</td>
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<tr>
<td>Ashland™ 980/940/981/941 Carbomer</td>
<td>Carbomer</td>
<td>Powder</td>
<td><img src="image2" alt="structure" /></td>
<td>o rheology modifier o stabilization</td>
<td>o shampoos o styling products</td>
<td>0.2–0.5%</td>
</tr>
<tr>
<td>Benecel™ HPMC</td>
<td>Hydroxypropyl Methylcellulose</td>
<td>Powder</td>
<td><img src="image3" alt="structure" /></td>
<td>o stabilizes complex surfactant mixtures o increases lather density o increases lather volume o increases lather stability o thickens soap-based shampoos o Benecel K200M HPMC thickens hydroalcoholic systems</td>
<td>o shampoos o styling products</td>
<td>0.5–2.0%</td>
</tr>
<tr>
<td>Benecel E10 HPMC</td>
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<td>Powder</td>
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<tr>
<td>Benecel K200M HPMC</td>
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<tr>
<td>Klucel™ hydroxypropylcellulose</td>
<td>Hydroxypropylcellulose</td>
<td>Powder</td>
<td><img src="image4" alt="structure" /></td>
<td>o alcohol-soluble thickener o film-former</td>
<td>o styling products</td>
<td>0.2–1.0%</td>
</tr>
<tr>
<td>Natrosol™ hydroxyethylcellulose/ Natrosol 250 ME/HR/HHR</td>
<td>Hydroxyethylcellulose</td>
<td>Powder</td>
<td><img src="image5" alt="structure" /></td>
<td>o viscosity builder o stabilization</td>
<td>o conditioners o styling products</td>
<td>0.2–1.0%</td>
</tr>
<tr>
<td>trade name</td>
<td>INCI name</td>
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<td>structure</td>
<td>features and benefits</td>
<td>applications</td>
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</tbody>
</table>
| Natrosol™ Plus 330 CS      | CS        | Powder           | ![Structure](image1.png) | • provides stability for complex anionic, cationic, or nonionic surfactant systems  
• thickens cationic emulsions  
• can be post-added to adjust viscosity after emulsion forms and cools  
• produces instant crème gels at room temperature  
• high shear not required  
• emulsifier-free products  
• hair shine lotions  
• anti-frizz products  
• styling creams/lotions  
• conditioning creams  
• pomades, waxes, pastes | shampoo  
conditioner  
styling products  
Natrosol Plus 330 CS can be used in APG-based systems | 0.5–1.5%   |
| PolySurf™ 67               |           |                  | ![Structure](image2.png) |  
| Cetyl Hydroxyethylcellulose |           | Powder           | ![Structure](image3.png) |  
| RapiThix™ A-60 polymer     | Sodium Polyacrylate (and) Hydrogenated Polydecene (and) Trideceth-6 | White milky dispersion (57–59% solids) | ![Structure](image4.png) | • 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  
• 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 | ![Structure](image5.png) | • 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  
• emulsifier-free products  
• hair shine lotions  
• anti-frizz products  
• styling creams/lotions  
• conditioning creams  
• pomades, waxes, pastes | shampoo  
2 in 1 shampoos  
body washes  
styling creams  
gels  
lotions | 0.2–2.5%   |
| Ultrathix™ 20 polymer      | Acrylates/C10-30 Alkyl Acrylate Crosspolymer | Powder | ![Structure](image6.png) | • self-wetting rheology modifier with improved electrolyte tolerance  
• excellent sensorial properties  
• emulsion stabilization  
• hydroalcoholic systems  
• emulsifier-free products  
• hand sanitizers | shampoo  
2 in 1 shampoos  
body washes  
styling creams  
gels  
lotions | 0.2–1.5%   |
| Ultrathix 21 polymer       |           |                  | ![Structure](image7.png) |  

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<tr>
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<th>Description</th>
<th>Structure</th>
<th>Features and Benefits</th>
<th>Applications</th>
<th>Use Levels</th>
</tr>
</thead>
</table>
| Ceraphyl™ 60 cationic solution | Quaternium-22 | 60% aqueous solution | ![Structure](structure1.png) | - Mild cationic with pronounced substantivity to hair  
- Provides detangling, anti-static and conditioning  
- Binds moisture in hair care applications | - Shampoos  
- Conditioners  
- Gels  
- Mousses | Up to 4.8% solids |
| Ceraphyl 65 cationic solution | Quaternium-26 (and) Propylene Glycol | 55% solution | ![Structure](structure2.png) | - Mild cationic with pronounced substantivity to hair  
- Provides detangling, anti-static and conditioning  
- Cationic emulsification | - Shampoos  
- Conditioners | Up to 5.0% (rinse-off application only) |
| Ceraphyl 70 cationic solution | Quaternium-70 (and) Propylene Glycol | 54% solution | ![Structure](structure3.png) | - Mild cationic  
- Pronounced substantivity to skin and hair  
- Provides detangling, anti-static and conditioning  
- Cationic emulsification  
- Thermal protection from curling irons & blow dryers | - 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 |
<table>
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<th>features and benefits</th>
<th>applications</th>
<th>use levels</th>
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<tbody>
<tr>
<td>ProLipid™ 161 lamellar gel</td>
<td>Cetearyl Alcohol (and) Behenyl Alcohol (and) Hydroxyethyl Cetearamidopropyl-dimonium Chloride</td>
<td>White to cream colored flakes</td>
<td>CH₂(CH₂OH)₃ CH₃ OH and CH₃(CH₂OH)₃ CH₂OH CH₃(CH₂OH)₃ CH₂OH (Behenyl Alcohol) (Cetearyl Alcohol)</td>
<td>composed of vegetable-based amphiphilic compounds</td>
<td>shampoos</td>
<td>1.67–6.67% by weight when used for conditioning</td>
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<tr>
<td></td>
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<td>lamellar gel structurizing ingredient that enhances formulation texture and stability</td>
<td>conditioners</td>
<td>4.0–6.0% by weight when used as a structuring agent</td>
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<td>provides moisturization and conditioning to hair</td>
<td>styling creams/lotions</td>
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<td>ease of wet and dry combing</td>
<td>mousses</td>
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<td>makes hair feels soft and smooth</td>
<td>permanent wave solutions</td>
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<td>binder</td>
<td>hair relaxers</td>
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<td>thickener</td>
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<td>opacifying agent</td>
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<td></td>
<td>substantive over a broad pH range</td>
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<tr>
<td>Zenix™ 4617 phosphate ester surfactant</td>
<td>Oleth-5 Phosphate</td>
<td>Liquid</td>
<td></td>
<td>silicone-like performance without silicone when combined with cationic guar</td>
<td>shampoos</td>
<td>2.0–4.0%</td>
</tr>
<tr>
<td>ProLipid™ 161 lamellar gel</td>
<td>Cetearyl Alcohol (and) Behenyl Alcohol (and) Hydroxyethyl Cetearamidopropyl-dimonium Chloride</td>
<td>White to cream colored flakes</td>
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<td>lamellar gel structurizing ingredient that enhances formulation texture and stability</td>
<td>conditioners</td>
<td>4.0–6.0% by weight when used as a structuring agent</td>
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<td>shampoos</td>
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<td>composed of vegetable-based amphiphilic compounds</td>
<td>conditioners</td>
<td>4.0–6.0% by weight when used as a structuring agent</td>
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<td>lamellar gel structurizing ingredient that enhances formulation texture and stability</td>
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<td>substantive over a broad pH range</td>
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</table>

**vincience™ biotHAIrapy™ biofunctionals**

<table>
<thead>
<tr>
<th>trade name</th>
<th>INCI name</th>
<th>description</th>
<th>benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capauxein™ G2 biofunctional</td>
<td>Water, Glycerin, Hydrolyzed Corn Protein, Adenosine, Magnesium Ascorbyl Phosphate, Carnitine</td>
<td>Inspired by the “Hair Fullness System™” associated with hair density</td>
<td>Capauxein G2 is associated with an increase in key biomarkers:</td>
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<td>Ki67 and β1-integrin, markers of proliferation and communication respectively (in vitro, ex vivo)</td>
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<td>versican and Noggin, highly expressed during the anagen phase in the dermal papilla (3D-spheres)</td>
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<td>Capauxein G2 clinical results on 39 panelists</td>
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<td>a healthier scalp with less visible oiliness and more hydration (in vivo)</td>
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<td>a visible maintenance of the anagen phase (in vivo)</td>
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<td>a visible improvement of hair density and fullness (in vivo)</td>
</tr>
<tr>
<td>Chromafend™ biofunctional</td>
<td>Water (aqua) (and) Glycerin (and) Hydrolyzed Linseed Extract</td>
<td>A flax seed extract inspired by the “Hair Melanin System™” to help hair preserve its original color</td>
<td>Chromafend™ biofunctional is associated with an increase in the melanin in the hair cortex</td>
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<td>associated in vitro, ex vivo with an increase of tyrosinase (tyrosinase is involved in melanin production)</td>
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<td>associated with the in vitro increase in TRP-1 (TRP-1 is known to participate in melanin synthesis)</td>
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<td>associated with in vitro increase in Pmel 17 (Pmel 17 is associated with favorable conditions for melanin synthesis)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>associated with an in vitro increase of MITF (MITF is known to regulate melanin synthesis)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>associated with an in vitro increase of c-kit (c-kit is associated with melanin process)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>associated with an in vitro increase of PAR-2 (PAR-2 helps transfer melanin into keratinocytes)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ex vivo, Chromafend is associated with an increase of the melanin in the hair cortex</td>
</tr>
<tr>
<td>trade name</td>
<td>INCI name</td>
<td>description</td>
<td>benefits</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Dynagen™      | Water (aqua) (and) Glycerin (and) Hydrolyzed Yeast Protein | A yeast extract inspired by the “Hair Keratin System™” for stronger and healthier looking hair | o consumer-perceivable benefit for stronger, thicker, healthier hair feel (in vivo)  
o associated with ex vivo increase in key protein markers, keratin 14, keratin 17, keratin 71, trichohyalin, all of which are associated with minimization of hair fall  
o associated with ex vivo increase in collagen I  
o associated with ex vivo increase in collagen IV and CD34 (both of these compounds are associated with healthy appearance of the hair) |
| Procataline™  | Water (aqua) (and) Glycerin (and) Pisum Sativum [pea] Extract | A pea extract inspired by the “Hair Detox System™” for healthier, younger looking hair | o associated ex vivo with an increase of catalase enzyme expression (a decrease in catalase activity is associated with environmental damage and hair aging)  
o associated ex vivo with a maintenance of p63 expression in stress conditions (p63 is associated with cell regeneration and is shown to be related to hair growth)  
o associated with a decrease of caspase-3 expression in stress conditions (caspases play a critical role in apoptosis) (ex vivo)  
ex vivo, Procataline is associated with reduced signs of aging induced by H₂O₂ stress, such as maintenance of the melanin in the hair cortex |
| Protectagen™  | 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 | o associated with an increase in stem cells markers, key to the maintenance of hair growth capital (keratin 15, α6-Integrin, ß-Catenin and p63) (ex vivo)  
may help preserve hair follicle against harmful UV damage, evidenced by the lower expression of p53 markers (ex vivo)  
associated ex vivo 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.

<table>
<thead>
<tr>
<th>trade name</th>
<th>INCI name</th>
<th>hair care product categories</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>hair aging at the roots</td>
</tr>
<tr>
<td>Capauxein™</td>
<td>Water (aqua) (and) Glycerin (and) Hydrolyzed Corn Protein</td>
<td>●</td>
</tr>
<tr>
<td>Chromafend™</td>
<td>Water (aqua) (and) Glycerin (and) Hydrolyzed Linseed Extract</td>
<td>●</td>
</tr>
<tr>
<td>Dynagen™</td>
<td>Water (aqua) (and) Glycerin (and) Hydrolyzed Yeast Protein</td>
<td>●</td>
</tr>
<tr>
<td>Procataline™</td>
<td>Water (aqua) (and) Glycerin (and) Pisum Sativum [pea] Extract</td>
<td>●</td>
</tr>
<tr>
<td>Protectagen™</td>
<td>Water (aqua) (and) Glycerin (and) Hydrolyzed Rice Protein</td>
<td>●</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>trade name</th>
<th>INCI name</th>
<th>description/form</th>
<th>structure</th>
<th>features and benefits</th>
<th>applications</th>
<th>use levels</th>
</tr>
</thead>
</table>
| Escalol™ HP UV filter  | DimethylPAB Amidopropyl Laurdimonium Tosylate                              | 100% active powder | ![Structure](image) | o protects hair from UV light  
 o substantive  
 o conditions hair giving it body and manageability  
 o provides detangling and anti-static properties to hair  
 o easy to handle  
 o broad raw material compatibility | o gels  
 o mousses  
 o styling sprays  
 o serums  
 o hair treatment  
 o pomades, waxes, pastes  
 o conditioners | 0.1–0.5% solids |
| Escalol HP 610 UV filter | DimethylPAB Amidopropyl Laurdimonium Tosylate [and] Water [and] Propylene Glycol Stearate | Creamy waxy solid | ![Structure](image) | | | |

### Preservatives

<table>
<thead>
<tr>
<th>trade name</th>
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<th>description/form</th>
<th>structure</th>
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<th>applications</th>
<th>use levels</th>
</tr>
</thead>
</table>
| Germaben™ II preservative | Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben | Clear liquid     | ![Structure](image) | o broad-spectrum activity against gram-positive and gram-negative bacteria, yeast and mold  
 o effective over broad pH range: 3.0–7.5 | o shampoos  
 o conditioners  
 o mousses  
 o creams  
 o pomades, waxes, pastes | 0.5–1.0% |
| Germaben II-E preservative | Germall™ 115 preservative | White, free-flowing hygroscopic powder | ![Structure](image) | o very effective against gram-positive and gram-negative bacteria  
 o acts synergistically with other preservatives  
 o effective over broad pH range: 3–9 | o shampoos  
 o conditioners  
 o mousses  
 o creams  
 o pomades, waxes, pastes | 0.2–0.6% |
| Germall II preservative | Diazolidinyl Urea | White, free-flowing hygroscopic powder | ![Structure](image) | o broad-spectrum activity against gram-positive and gram-negative bacteria  
 o synergistic with other preservatives  
 o effective over broad pH range: 3–9 | o shampoos  
 o conditioners | 0.1–0.3% |
| Germall™ Plus preservative | Diazolidinyl Urea (and) Iodopropynyl Butylcarbamate | White, free-flowing hygroscopic powder | ![Structure](image) | o broad-spectrum antimicrobial activity  
 o effective over broad pH range: 3–8 | o shampoos  
 o conditioners  
 o mousses  
 o gels  
 o styling creams/lotions | 0.05–0.2% |

† For country-specific details, please contact your account manager
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</tr>
</thead>
</table>
| Liquid Germall™ Plus preservative | Propylene Glycol (and) Diazolidinyl Urea (and) Iodopropynyl Butylcarbamate | Clear liquid     | ![](image1.png) | broad-spectrum antimicrobial activity  
- effective over broad pH range: 3–8                                                   |  
- shampoo  
- conditioner  
- gels  
- styling creams/lotions                                                            | 0.1–0.5%      |
| LiquaGard™ preservative          | Butylene Glycol (and) Iodopropynyl Butylcarbamate                         | Liquid           | ![](image2.png) |  
- effective fungicide  
- works over wide pH range: 4–9  
- compatible with broad range of raw materials including surfactants and proteins |  
- shampoo  
- conditioner  
- styling creams/lotions  
- hair colorants  
- gels                                                                         | 0.1–0.2%      |
| LiquaPar™ ME preservative        | Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Caprylyl Glycol | Colorless to light brown solution | ![](image3.png) | provides similar efficiency to traditional paraben combinations  
- effective over broad pH range: 3.0–7.5  
- global use†                                                                   |  
- styling creams/lotions  
- anhydrous systems                                                              | 0.5–1.0%      |
| LiquaPar MEP preservative        | Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben  | Clear, yellowish solution | ![](image4.png) | broad-spectrum activity against bacteria, yeast and mold  
- effective over broad pH range: 3.0–7.5  
- global use†                                                                   |  
- shampoo  
- conditioner  
- anhydrous systems                                                              | 0.3–1.0%      |

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<th>use levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>LiquaPar™ PN</td>
<td>Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben (and) Butylparaben</td>
<td>Clear liquid</td>
<td><img src="" alt="LiquaPar™ PN structure" /></td>
<td>broad-spectrum activity against bacteria, yeast and mold</td>
<td>styling creams/lotions</td>
<td>0.5–1.0%</td>
</tr>
<tr>
<td>Optiphen™ 200 preservative</td>
<td>Phenoxyethanol (and) Caprylyl Glycol</td>
<td>Clear to pale straw liquid</td>
<td><img src="" alt="Optiphen™ 200 structure" /></td>
<td>broad-spectrum activity against bacteria, yeast and mold</td>
<td>shampoos, conditioners, gels, mousses, creams, pomades, waxes, pastes</td>
<td>0.75–1.3%</td>
</tr>
<tr>
<td>Optiphen preservative¹</td>
<td>Phenoxyethanol (and) Caprylyl Glycol</td>
<td>Clear to pale straw liquid (EU: Colorless to light yellow solution)</td>
<td><img src="" alt="Optiphen preservative structure" /></td>
<td>broad-spectrum activity against bacteria, yeast and mold; additional fungicidal protection may be needed in difficult formulations</td>
<td>shampoos, conditioners, gels, mousses, styling creams/lotions, pomades, waxes, pastes</td>
<td>0.75–1.5%</td>
</tr>
<tr>
<td>Optiphen DP preservative</td>
<td>Propylene Carbonate (and) Benzoic Acid (and) Dehydroacetic Acid (and) Propanediol</td>
<td>Liquid</td>
<td><img src="" alt="Optiphen DP structure" /></td>
<td>microbiostatic spectrum of activity, in some formulations additional booster is needed</td>
<td>shampoos, conditioners, gels, mousses, styling creams/lotions, pomades, waxes, pastes</td>
<td>0.3–2.0%</td>
</tr>
<tr>
<td>Optiphen DLP preservative</td>
<td>Propylene Carbonate (and) Dehydroacetic Acid</td>
<td>Liquid</td>
<td><img src="" alt="Optiphen DLP structure" /></td>
<td>antifungal boosting activity at low levels; full antimicrobial spectra at high levels</td>
<td>shampoos, conditioners, gels, mousses, styling creams/lotions, pomades, waxes, pastes</td>
<td>0.3–2.0%</td>
</tr>
</tbody>
</table>

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<table>
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<th>use levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optiphen™ Plus preservative</td>
<td>Phenoxyethanol (and) Caprylyl Glycol (and) Sorbic Acid</td>
<td>Clear to pale straw liquid [EU: Colorless to light yellow solution]</td>
<td><img src="image" alt="structure" /></td>
<td>○ broad spectrum activity against bacteria, yeast and mold ○ ideal for slightly acidic personal care products ○ effective pH range up to 6.0 ○ global use†</td>
<td>○ mousses ○ shampoos ○ conditioners ○ pomades, waxes, pastes</td>
<td>0.75–1.5%</td>
</tr>
<tr>
<td>Optiphen BD preservative (Available in EU, LA, AP)</td>
<td>Benzyl Alcohol (and) Benzoic Acid (and) Dehydroacetic Acid</td>
<td>Colorless to light yellow solution</td>
<td><img src="image" alt="structure" /></td>
<td>○ microbiostatic spectrum of activity against bacteria, mold and yeast ○ effective up to pH 6.4 ○ global use† ○ nature-identical combination ○ ecocert-compliant</td>
<td>○ styling creams/lotions ○ shampoos ○ conditioners</td>
<td>0.3–1.0%</td>
</tr>
<tr>
<td>Optiphen BSB-N preservative (sold as Rokonsal™ 6SB-N preservative in EU)</td>
<td>Benzyl Alcohol (and) Glycerin (and) Benzoic Acid (and) Sorbic Acid</td>
<td>Colorless light brown liquid</td>
<td><img src="image" alt="structure" /></td>
<td>○ effective against gram-positive and gram-negative bacteria, yeast and mold ○ effective up to pH 5.4 ○ global use† ○ nature-identical combination ○ ecocert-compliant</td>
<td>○ shampoos ○ conditioners ○ gels ○ mousses ○ styling creams/lotions ○ pomades, waxes, pastes</td>
<td>0.3–1.0%</td>
</tr>
<tr>
<td>Optiphen BSP (Sold as Rokonsal BSP preservative in EU)</td>
<td>Phenoxyethanol (and) Propylene Glycol (and) Benzoic Acid (and) Sorbic Acid</td>
<td>Colorless light brown liquid</td>
<td><img src="image" alt="structure" /></td>
<td>○ effective against gram-positive and gram-negative bacteria, yeast and mold ○ effective up to pH 5.4 ○ global use† ○ nature-identical combination</td>
<td>○ shampoos ○ conditioners ○ gels ○ mousses ○ styling creams/lotions ○ pomades, waxes, pastes</td>
<td>0.3–1.0%</td>
</tr>
<tr>
<td>Optiphen BSB-W preservative (Available in EU, LA, AP)</td>
<td>Benzyl Alcohol (and) Water (aqua) (and) Sodium Benzoate (and) Potassium Sorbate</td>
<td>Colorless light brown liquid</td>
<td><img src="image" alt="structure" /></td>
<td>○ effective against gram-positive and gram-negative bacteria, yeast and mold ○ effective up to pH 5.4 ○ global use† ○ nature-identical combination ○ ecocert-compliant</td>
<td>○ shampoos ○ conditioners ○ gels ○ mousses ○ styling creams/lotions ○ pomades, waxes, pastes</td>
<td>0.3–1.0%</td>
</tr>
<tr>
<td>Optiphen MIT preservative</td>
<td>Methylisothiazolinone and Water (aqua)</td>
<td>Colorless to light yellow solution</td>
<td><img src="image" alt="structure" /></td>
<td>○ mainly effective against gram-positive and gram-negative bacteria ○ effective between pH 2–10 ○ global use†</td>
<td>○ shampoos ○ conditioners ○ gels ○ mousses ○ styling creams/lotions ○ pomades, waxes, pastes</td>
<td>0.05–0.1%</td>
</tr>
</tbody>
</table>

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

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<table>
<thead>
<tr>
<th>trade name</th>
<th>INCI name</th>
<th>description/form</th>
<th>structure</th>
<th>features and benefits</th>
<th>applications</th>
<th>use levels</th>
</tr>
</thead>
</table>
| Optiphen™ MIT Plus preservative¹ | Methylisothiazolinone (and) Phenethyl Alcohol (and) PPG-2- Methyl Ether and water (Aqua) | Colorless to light yellow solution | ![Structure](image1.png) | - broad-spectrum activity against bacteria, yeast and mold  
- effective between pH 2–10  
- global use¹ | - shampoos  
- conditioners  
- gels  
- mousses  
- styling creams/lotions  
- pomades, waxes, pastes | 0.05–0.2% |
| Optiphen MIT Ultra preservative¹ | Methylisothiazolinone (and) Phenylpropanol (and) Propylene Glycol (and) Water (Aqua) | Colorless to light yellow solution | ![Structure](image2.png) | - broad-spectrum activity against bacteria, yeast and mold  
- effective between pH 2–10  
- global use† | - 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 | ![Structure](image3.png) | - microbiostatic spectrum of activity against bacteria, mold and yeast  
- effective up to pH 6.4  
- global use¹ | - 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 | ![Structure](image4.png) | - broad-spectrum activity against bacteria, with enhanced performance against fungi and yeast  
- fast-acting  
- effective up to pH 7.0 max.  
- global use¹ | - shampoos  
- conditioners  
- styling creams/lotions  
- pomades, waxes, pastes | 0.1–0.4%³ |
| 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 | ![Structure](image5.png) | - broad-spectrum activity against bacteria, fungi and yeast  
- fast-acting  
- effective up to pH 7.0 max.  
- global use¹ | - shampoos  
- conditioners  
- styling creams/lotions  | 0.1–0.3% |
| Rokonsal KS-4 preservative (Available in EU, LA, AP) | Benzyl Alcohol (and) Methylchloroisothiazolinone (and) Methylisothiazolinone (and) Propylene Glycol | Colorless to yellow solution | ![Structure](image6.png) | - broad spectrum activity against bacteria, yeast and mold  
- fast-acting  
- effective up to pH 8.0 max.  
- global use¹ | - shampoos  
- conditioners | 0.05–0.12% |

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<table>
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<tr>
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<th>structure</th>
<th>features and benefits</th>
<th>applications</th>
<th>use levels</th>
</tr>
</thead>
</table>
| Suttocide™ A preservative | Sodium Hydroxymethylglycinate                 | Clear to pale yellow solution                         | ![structure](image) | o broad-spectrum preservation  
  o long history of use for efficacy  
  o fast-acting  
  o effective pH: 3.5–12  
  o global use† | o shampoos  
  o conditioners  
  o gels  
  o styling creams/lotions | 0.5–1.0% |

<table>
<thead>
<tr>
<th>trade name</th>
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<th>features and benefits</th>
<th>applications</th>
<th>use levels</th>
</tr>
</thead>
</table>
| Conarom™ P-2 aromatic  | Phenethyl Alcohol (and) Caprylyl Glycol (and) Propanediol (and) Polyglyceryl-4 Laurate/Sebacate (and) Polyglyceryl-6 Caprylate/Caprate (and) Aqua (Water) | Nature-identical fragrance additive with naturally derived emulsifier system | ![structure](image) | o mild rose-like aroma, containing naturally derived and nature identical ingredients  
  o aromatic ingredient that provides broad-spectrum protection  
  o complements aroma of final product  
  o effective pH range 4–8 | o shampoos  
  o conditioners  
  o gels  
  o mousses  
  o styling creams/lotions  
  o pomades, waxes, pastes | 0.3–2.0% |

<table>
<thead>
<tr>
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<th>description/form</th>
<th>structure</th>
<th>features and benefits</th>
<th>applications</th>
<th>use levels</th>
</tr>
</thead>
</table>
| Antara™ 430 polymer (Sold as Polectron™ in the USA) | Styrene/VP Copolymer | Fluid, milky white emulsion; 40% solids              | ![structure](image) | o opacifier  
  o forms strong, light-stable films with high water resistance  
  o high acid tolerance  
  o dye acceptor in hair color preparations | o conditioners  
  o acid rinses  
  o permanent wave solutions  
  o gels  
  o hair colorants  
  o cream developers | Up to 1.0% solids |

<table>
<thead>
<tr>
<th>trade name</th>
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<th>structure</th>
<th>features and benefits</th>
<th>applications</th>
<th>use levels</th>
</tr>
</thead>
</table>
| Cerasynt™ IP stearate ester | Glycol Stearate (and) Stearamide AMP | White to cream colored flakes                          | ![structure](image) | o imparts pearlescence and opacity  
  o shampoos  
  o styling creams/lotions | Up to 2.0% solids |

<table>
<thead>
<tr>
<th>trade name</th>
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<th>structure</th>
<th>features and benefits</th>
<th>applications</th>
<th>use levels</th>
</tr>
</thead>
</table>
| Cerasynt PA stearate ester | Propylene Glycol Stearate | White to cream colored flakes                          | ![structure](image) | o imparts pearlescence and opacity  
  o shampoos  
  o styling creams/lotions | Up to 2.0% solids |
## Emulsifiers

<table>
<thead>
<tr>
<th>trade name</th>
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<th>applications</th>
<th>use levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerasynt™ 945 steareate ester</td>
<td>Glyceryl Stearate (and) Laureth-23</td>
<td>Flake</td>
<td></td>
<td>Nonionic primary emulsifier</td>
<td>Hair straighteners</td>
<td>1.0–3.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>High pH tolerance</td>
<td>Styling creams/lotions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Forms opaque gels with mineral oil</td>
<td>Conditioners</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Styling creams/lotions</td>
<td>0.25–3.0%</td>
</tr>
</tbody>
</table>

## Emollients

### Esters based on alpha hydroxy acids

<table>
<thead>
<tr>
<th>trade name</th>
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<th>structure</th>
<th>features and benefits</th>
<th>use level</th>
<th>shampoos</th>
<th>styling</th>
<th>hair sprays</th>
<th>pomades, waxes, pastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceraphyl™ 31 ester</td>
<td>Lauryl Lactate</td>
<td>Liquid</td>
<td></td>
<td>Plasticizing and de-tackifying agent</td>
<td>0.3–5.0%</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Highly effective emolliency with lubricity</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Improves product slip upon application</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceraphyl 41 ester</td>
<td>C12-15 Alkyl Lactate</td>
<td>Liquid</td>
<td></td>
<td>Effective de-tackifying agent</td>
<td>0.3–5.0%</td>
<td>●</td>
<td></td>
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<td>●</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Spreads easily when applied</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Dry initial feel with non-oily after-feel</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Provides viscosity building and lather creaminess to shampoos</td>
<td></td>
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<tr>
<td>Ceraphyl 50 ester</td>
<td>Myristyl Lactate</td>
<td>Soft solid</td>
<td></td>
<td>Imparts lubricity</td>
<td>0.3–5.0%</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>trade name</td>
<td>INCI name</td>
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<td>structure</td>
<td>features and benefits</td>
<td>use level</td>
<td>shampoos</td>
<td>shine products</td>
<td>conditioners</td>
<td>styling</td>
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</tbody>
</table>
| Ceraphyl™ 140A ester | Isodecyl Oleate | Liquid | \[
H_2C_\text{CH}_3
\] | \[
C_2H_{17}-C-O-C-C_2H_{17}-\text{CH}=\text{CH}-C_2H_{17}
\] | ○ 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 | \[
\text{CH}_3\text{O}-C-(\text{CH}_2)_4-C-O-\text{CH}_3
\] | \[
\text{CH}_3
\] | ○ 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% | | | | | | |
| Ceraphyl 368M ester | Ethylhexyl Palmitate | Liquid | \[
\text{CH}_3-(\text{CH}_2)_2-\text{CH}-\text{CH}_2-O-(\text{CH}_2)_4-\text{CH}_3
\] | \[
\text{CH}_3\text{CH}_3
\] | ○ 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 | \[
\text{CH}_3-(\text{CH}_2)_6-C-O-\text{CH}_2-\text{CH}-\text{CH}_2-\text{C}_2\text{H}_{17}
\] | \[
\text{C}_2\text{H}_{13}\n\] | ○ all-purpose lubricant which imparts dry, emollient feel | 0.3–5.0% | | | | | | |
| Ceraphyl 424 ester | Myristyl Myristate (and) Myristyl Laurate | Waxy solid | \[
\text{CH}_3-(\text{CH}_2)_{12}-C-O-(\text{CH}_2)_{13}-\text{CH}_3
\] | | ○ enhances spreadability and reduces drag upon product application  
○ liquifies upon contact with the body | 0.3–5.0% | | | | | | |
| Ceraphyl 55 ester | Tridecyl Neopentanoate | Liquid | \[
\text{H}_2\text{C}_{13}-O-C-C-\text{CH}_3
\] | \[
\text{CH}_3\n\] | ○ imparts elegant, light, non-oily feel | 0.3–5.0% | | | | | | |
| Ceraphyl 375 ester | Isostearyl Neopentanoate | Liquid | \[
\text{C}_9\text{H}_{17}-\text{CH}_2
\] | \[
\text{C}_6\text{H}_{13}-\text{CH}_2-\text{O}-C-C-\text{CH}_3
\] | ○ improves product spreadability and playtime  
○ imparts elegant, light, non-oily feel | 0.3–5.0% | | | | | |
<table>
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<th>hairsprays</th>
</tr>
</thead>
</table>
| Ceraphyl™ ODS ester | Octydodecyl Stearate | Liquid | \[
\text{CH}_3\text{(CH}_2\text{)}_{16}\text{-O-OCH}_2\text{CH(CH}_2\text{)}_{9}\text{CH}_3
\]
| o imparts dry initial feel, luxurious mid-feel with a silky after-feel
| o enhances product spreadability
| o 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 Stearyl Stearate | Liquid | \[
\text{C}_6\text{H}_{13}\text{-C-O\-CH-(CH}_2\text{)}_{10}\text{-C-O\-CH}_2\text{-CH}
\]
| o imparts dry initial feel with lubricious after-feel
| o long-lasting emollient | 0.3–5.0% | * | * | |

| Ceraphyl 847 ester (complies to organic certifications, like Ecocert) | Octydodecyl Stearoyl Stearate | Liquid | \[
\text{CH}_2\text{-O\-C\-(CH}_2\text{)}_{10}\text{-CH\-O\-C\-H}_{17}\text{H}_{17}
\]
| o offers dry initial feel with long-lasting cushiony, rich after-feel
| o 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 | \[
\text{CH}_3\text{-OOCR}
\]
| o enhances product spreadability
| o offers smooth, light, silky after-feel | 0.3–5.0% | * | * |

**esters for rinse-off products**

| Ceraphyl RMT ester | Castoryl Maleate | Liquid | \[
\text{CH}_3\text{-OOCR}
\]
| o offers clinically-proven moisturization in rinse-off products | 0.3–5.0% | * |

**esters with solubilizing capability**

| X-Tend™ 226 ester | Phenethyl Benzoate | Liquid | \[
\text{R = Caprylic/Capric Acid}
\]
| o high solubilizing capacity
| o shine enhancement
| o excellent skin feel
| o increases the critical wavelength and the UVA/UVB ratio
| o boosts polymeric shine in hairsprays | 0.3–5.0% | * | * |
## Lubricants

<table>
<thead>
<tr>
<th>trade name</th>
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<th>applications</th>
<th>use levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubrajel™ II XD hydrogel</td>
<td>Glycerin and Glyceryl Polyacrylate</td>
<td><strong>Theoretical structure:</strong> Glyceryl Acetate/Acrylic Acid Copolymer</td>
<td>Clear gels</td>
<td>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</td>
<td>0%</td>
<td>2.0–25.0%</td>
</tr>
<tr>
<td>Lubrajel** CG hydrogel</td>
<td>Glycerin and Glyceryl Acrylate/Acrylic Acid Copolymer and Propylene Glycol</td>
<td></td>
<td>Very pale yellow viscous gel</td>
<td>Multifunctional ingredient providing sensory and stabilization benefits, consumer pleasing aesthetics with a natural ingredient, conforms to ecocert natural and organic cosmetic standard</td>
<td>0%</td>
<td>2.0–25%</td>
</tr>
<tr>
<td>Lubrajel** DV hydrogel</td>
<td>Glycerin and Glyceryl Acrylate/Acrylic Acid Copolymer and Propylene Glycol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.0–25.0%</td>
</tr>
<tr>
<td>Lubrajel** MS hydrogel</td>
<td>Glycerin and Glyceryl Acrylate/Acrylic Acid Copolymer and Propylene Glycol</td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
<td>2.0–25.0%</td>
</tr>
<tr>
<td>Lubrajel Natural skin conditioning gel</td>
<td>Glycerin, Beta-Glucan, Algin, Xanthan Gum</td>
<td><strong>Theoretical structure:</strong> Glycerol Acrylate/Carboxyvinyl backbone</td>
<td></td>
<td></td>
<td></td>
<td>0.3–50.0%</td>
</tr>
<tr>
<td>Lubrajel** NP hydrogel</td>
<td>Glycerin and Glyceryl Acrylate/Acrylic Acid Copolymer</td>
<td></td>
<td>Very pale yellow viscous gel</td>
<td>Multifunctional ingredient providing sensory and stabilization benefits, consumer pleasing aesthetics with a natural ingredient, conforms to ecocert natural and organic cosmetic standard</td>
<td>0%</td>
<td>2.0–25%</td>
</tr>
<tr>
<td>Lubrajel** Oil hydrogel</td>
<td>Glycerin and Glyceryl Acrylate/Acrylic Acid Copolymer and Propylene Glycol and PVM/MA Copolymer</td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
<td>0.2–5.0%</td>
</tr>
<tr>
<td>Lubrajel** PF hydrogel (Paraben-free version of Lubrajel CG)</td>
<td>Glycerin and Glyceryl Acrylate/Acrylic Acid Copolymer</td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
<td>5.0–25.0%</td>
</tr>
<tr>
<td>Lubrajel** TW hydrogel</td>
<td>Propylene Glycol and Glycerin and Glyceryl Acrylate/Acrylic Acid Copolymer</td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
<td>2.0–25.0%</td>
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</tbody>
</table>

*Also available in paraben-free version

**Lubrajel and Lubrasil are registered trademarks of United-Guardian, Inc.
<table>
<thead>
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<th>applications</th>
<th>use levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubrajel™ WA</td>
<td>Propylene Glycol (and) Glycerin (and) Glyceryl Acrylate/Acrylic Acid Copolymer (and) Poloxamer 184</td>
<td>hydrogel</td>
<td>Clear gels</td>
<td>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</td>
<td>hair treatment gels</td>
<td>25.0–25.0%</td>
</tr>
<tr>
<td>Lubrasil™ microemulsion</td>
<td>Glycerin and Glycerol Acrylate/Acryl Acid Copolymer and Polysorbate 20 and Cyclopentasiloxane and Propylene Glycol and Dimethiconol</td>
<td>microemulsion</td>
<td></td>
<td></td>
<td></td>
<td>5.0–25.0%</td>
</tr>
<tr>
<td>Lubrasil™ II DM</td>
<td>Glycerin (and) Glycerol Acrylate/Acryl Acid Copolymer (and) Laureth-23 (and) Dimethicone</td>
<td>microemulsion</td>
<td></td>
<td></td>
<td></td>
<td>2.5–10.0%</td>
</tr>
<tr>
<td>Lubrasil™ II SB</td>
<td>Glycerin (and) Glycerol Acrylate/Acryl Acid Copolymer (and) Laureth-23 (and) Cyclopentasiloxane (and) Dimethiconol</td>
<td>microemulsion</td>
<td></td>
<td></td>
<td></td>
<td>3.0–15.0%</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Size (microns)</th>
<th>INCI</th>
<th>Description / Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captivates™ HC0001</td>
<td>visible 500 - 700</td>
<td>Water (Aqua) (and) Butyrospermum Parkii (Shea Butter) (and) Ultramarines (C.I. 77007) (and) Gelatin (and) Acacia Senegal Gum (and) Titanium Dioxide (C.I. 77891) (and) Propylene Glycol (and) Diazolidinyl urea (and) Xanthan Gum (and) Methylparaben (and) Propylparaben</td>
<td>Moisturizing Shea Butter Capsule  Blue shea butter capsules. Suitable for emulsions (creams and lotions) but also shower, shampoo, conditioner</td>
</tr>
<tr>
<td>Captivates HC0002</td>
<td>visible 1250</td>
<td>Paraffinum Liquidum (and) Water (Aqua) (and) Gelatin (Marine, fish) (and) Acacia Senegal Gum (and) Tocopherol Acetate (and) Prunus Persica (Peach) Kernel Oil (and) Mica (and) Titanium Dioxide (and) Propylene Glycol (and) Xanthan gum (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben</td>
<td>Universal Pearl Capsule  Pigmented blend of mineral oil, Vitamin E acetate and peach kernel oil. Typical Rinse off capsule</td>
</tr>
<tr>
<td>Captivates HC4408</td>
<td>visible 750 - 1000</td>
<td>Water (Aqua) (and) Trimethylsiloxyphenyl Dimethicone (and) Gelatin (and) Acacia Senegal Gum (and) Phenoxyethanol (and) Xanthan Gum (and) Benzoic Acid (and) Dehydroacetic Acid</td>
<td>Hair Shine Bubble Capsule  Contains Si-Tec PTM 1000 for hair shine. Colorless capsule looks like air bubbles</td>
</tr>
<tr>
<td>Captivates GL7833</td>
<td>visible 1300</td>
<td>Water (Aqua) (and) Bambusa Arundinacea Stem Extract (and) Alginate (and) C.I. 77007 (Ultramarines) (and) Phenoxyethanol (and) Caprylyl Glycol (and) Calcium Chloride (and) Chondrus Crispus (Carrageenan) (and) Hydrochloric Acid</td>
<td>Exfoliation Bead  Blue bead filled with bamboo. The beads break upon usage and releases the bamboo as scrub particles. Face cleansing and shampoos. Alginate/Agar drop in matrix for shower gels</td>
</tr>
<tr>
<td>Captivates GL7542</td>
<td>visible 1000</td>
<td>Water (Aqua) (and) C.I. 77288 Chromium Oxide Green (and) Alginate (and) Calcium Chloride (and)Phenoxyethanol (and) Agar (and) Benzoic Acid (and) Dehydroacetic Acid (and) Sodium Hydroxide</td>
<td>Color Burst Bead  Universal Green  For use in surfactant systems such as shower gels and shampoos. The beads break during usage and color the foam green.</td>
</tr>
<tr>
<td>Trade Name</td>
<td>Size (microns)</td>
<td>INCI</td>
<td>Description / Benefit</td>
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</tr>
<tr>
<td>Captivates™ GL7990</td>
<td>visible 1000</td>
<td>Water (Aqua) (and) Algin (and) C.I. 73360 (Red 30) (and) Calcium Chloride (and) Gellan Gum (and) Glycerin (and) Phenoxyethanol (and) Caprylyl Glycol (and) PVP</td>
<td>Color Burst Bead Universal Red For use in surfactant systems such as shower gels and shampoos. The beads break during usage and color the foam red.</td>
</tr>
<tr>
<td>Captivates GL7975</td>
<td>visible 1000</td>
<td>Water (Aqua) (and) C.I. 77007 (Ultramarines) (and) Algin (and) Calcium Chloride (and) Gellan Gum (and) Phenoxyethanol (and) Caprylyl Glycol (and) Butylated PVP</td>
<td>Color Burst Bead Universal Blue For use in surfactant systems such as shower gels and shampoos. The beads break during usage and color the foam blue.</td>
</tr>
<tr>
<td>Captivates GL7620</td>
<td>visible 1000</td>
<td>Water (Aqua) (and) Mica (and) C.I. 77891 (Titanium Dioxide) (and) Phenoxyethanol (and) Caprylyl Glycol (and) Algin (and) Hydroxyethylcellulose (and) Calcium Chloride (and) Gellan Gum (and) C.I. 73360 (Red 30) (and) Glycerin (and) PVP</td>
<td>Color Shift Bead White bead that transitions to pink on rub out</td>
</tr>
<tr>
<td>Captivates GL7878</td>
<td>visible 3500</td>
<td>Water (Aqua) (and) C.I. 77891 (Titanium Dioxide) (and) Algin (and) C.I. 73360 (Red 30) (and) Phenoxyethanol (and) Caprylyl Glycol (and) Chondrus Crispus (Carrageenan) (and) Calcium Chloride (and) Glycerin (and) PVP</td>
<td>Pink Shimmer Bead Releases pink pearlescent shimmer on rub out.</td>
</tr>
<tr>
<td>Captivates GL7661</td>
<td>visible 1300</td>
<td>Water (Aqua) (and) Algin (and) Mica (and) Agar (and) Calcium Chloride (and) C.I. 77891 (Titanium Dioxide (and) Phenethyl Alcohol (and) PPG-2 Methyl Ether (and) C.I. 73360 (Red 30) (and) Glycerin (and) Methylisothiazolinone (and) PVP (and) Phenoxyethanol</td>
<td>Visual Bead Pink bead with Carrageenan/Agar drop in matrix. For most shower gels and shampoos. Imparts nice visual effect to the formulation. Purely aesthetics, no functionality</td>
</tr>
</tbody>
</table>
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Footnotes
1 - Patented technology
2 - Patent pending