AMPLIFY™ Functional Polymers are a family of functionalized polyolefin products designed to bring premium value to a wide variety of industries. Potential applications include flexible food and specialty packaging, polymer modification/compatibilization, adhesives/tie-layers, thermoplastic powder coating, protective metal pipe coating, and extrusion coating.

AMPLIFY™ EA Functional Polymers (100 Series)
These ethylene-ethyl acrylate (EEA) copolymers offer:

- Improved low temperature toughness and stress crack resistance in tie-layers
- High thermal stability, enabling use in high temperature processing conditions
- Exceptional adhesion, flexibility, and toughness across a broad service temperature range
- Excellent blend compatibility with other polyolefins
- Functional adhesion to polyolefins, metal, cellulose, polyester, polycarbonate, polyvinylidene chloride (PVDC), glass, foil, and polyolefins
- Easy processing on a wide range of extrusion and injection molding equipment

AMPLIFY™ GR Functional Polymers (200 Series)
The maleic anhydride (MAH) grafted polyolefins in the 200 Series provide:

- Reactive functionality for enhanced adhesion – primarily with nylon, ethylene vinyl alcohol (EVOH), and cellulose
- Adhesion to metal, polyethylene terephthalate (PET), polycarbonate, glass, foil, and polyolefins
- Melt indices well-suited for multi-layer structures
- Good heat resistance
- Impact resistance for nylon blends
- Inorganic filler compatibilization for thermoplastic olefins (TPOs)

To learn more about the value AMPLIFY™ Functional Polymers can bring to your applications, please contact your Dow representative, visit www.dowamplify.com or www.dowpolyolefins.com, or call a Dow customer service representative at 1-800-441-4369 in North America or +800-3694-6367 in Europe or +800-7776-7776 in Asia Pacific.

See back for more information.
## AMPLIFY™ Functional Polymers Product Portfolio (1)

<table>
<thead>
<tr>
<th>Resin Name</th>
<th>Potential Applications</th>
<th>Melt Index (I.) @190°C/2.16 kg, g/10 min</th>
<th>Comonomer Type, % or (Graft Level) (2)</th>
<th>Density¹⁰, g/cm³ (Base Resin)</th>
<th>Durometer Hardness, Shore A (Shore D) @ 1 sec</th>
</tr>
</thead>
</table>
| AMPLIFY EA 100 | • Polymer modification  
• Tie-layer to polyolefins and polar substrates (e.g., PVDC, PVC, PET, PBT, and PS)  
• Profile and tube extrusion | 1.3 Ethyl Acrylate, 15.0% | 0.930 | 87 (37) |
| AMPLIFY EA 101 | • Polymer modification  
• Tie-layer to polyolefins and polar substrates (e.g., PVDC, PVC, PET, PBT, and PS)  
• Color carrier  
• Profile extrusion  
• Low gel film | 6.0 Ethyl Acrylate, 18.5% | 0.931 | 86 (31) |
| AMPLIFY EA 102 | • Polymer modification  
• Tie-layer to polyolefins and polar substrates (e.g., PVDC, PVC, PET, PBT, and PS)  
• Color carrier | 6.0 Ethyl Acrylate, 18.5% | 0.931 | 86 (30) |
| AMPLIFY EA 103 | • Tie-layer  
• Color carrier  
• Adhesive blend component  
• Film laminate | 21.0 Ethyl Acrylate, 19.5% | 0.930 | 82 (27) |
| AMPLIFY GR 202 | • Extrusion coating  
• Injection molded parts  
• Tie-layer to nylon, EVOH, cellulose, polyolefins, and other polar substrates (including metal and foil) in blown and cast film  
• Thermoplastic powder coating  
• Polymer modification/compatibilization | 8.0 MALEIC ANHYDRIDE GRAFT (Very High) | 0.930 (LOW DENSITY POLYETHYLENE [LDPE]) | 95 (51) |
| AMPLIFY GR 204 | • Extrusion coating  
• Protective metal pipe coating  
• Tie-layer to nylon, EVOH, cellulose, polyolefins, and other polar substrates (including metal and foil) in blown and cast film  
• Thermoplastic powder coating  
• Polymer modification/compatibilization  
• High speed coating | 12.0 MALEIC ANHYDRIDE GRAFT (Very High) | 0.953 (HIGH DENSITY POLYETHYLENE [HDPE]) | 97 (64) |
| AMPLIFY GR 205 | • Extrusion coating  
• Injection molded parts  
• Tie-layer to nylon, EVOH, cellulose, polyolefins and other polar substrates (including metal and foil) in blown and cast film  
• Thermoplastic powder coating  
• Protective metal pipe coating  
• Polymer modification/compatibilization | 2.0 MALEIC ANHYDRIDE GRAFT (Very High) | 0.962 (HOPE) | 96 (67) |
| AMPLIFY GR 207 | • Extrusion coating  
• Tie-layer to nylon, EVOH, cellulose, polyolefins, and other polar substrates (including metal and foil) in cast film  
• Thermoplastic powder coating  
• Polymer modification/compatibilization | 2.1 MALEIC ANHYDRIDE GRAFT (Low) | 0.923 (LINEAR LOW DENSITY POLYETHYLENE [LLDPE]) | — |
| AMPLIFY GR 208 | • Impact/modulus modification of nylon and other high modulus and/or engineering resins  
• Tie-layer in coextruded films | 3.3 MALEIC ANHYDRIDE GRAFT (Medium) | 0.8985 (VERY LOW DENSITY POLYETHYLENE [VLDPE]) | 96 (36) |
| AMPLIFY GR 209 | • Impact/modulus modification of nylon and other high modulus and/or engineering resins  
• Tie-layer in coextruded films | 2.0 MALEIC ANHYDRIDE GRAFT (High) | 0.8985 (VLDPE) | 96 (35) |
| AMPLIFY GR 216 | • Excellent impact strength in blends with polyamide  
• Adhesion promoter  
• Polymer compatibilization | 1.25 MALEIC ANHYDRIDE GRAFT (High) | 0.87 (Plastomer) | 77 (22) |

¹Typical values, not to be construed as specifications. Users should confirm results by their own tests. Refer to individual technical data sheets for additional information.

²Dow Method based upon Infrared spectroscopy using analytical standards. Low < 0.25 wt%, Medium 0.25-0.5 wt%, High 0.5-1.0 wt%, Very High > 1.0 wt% MAH.

³ASTM D 792.
For more information on products, innovations, expertise, and other services available to you from Dow's Plastics business group, visit www.dowplastics.com and choose your region, or contact us as indicated below.

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