



益膜新

EVASIN EV3251FT DATA SHEET

32 mole%Ethylene Vinyl Alcohol Copolymer

Application

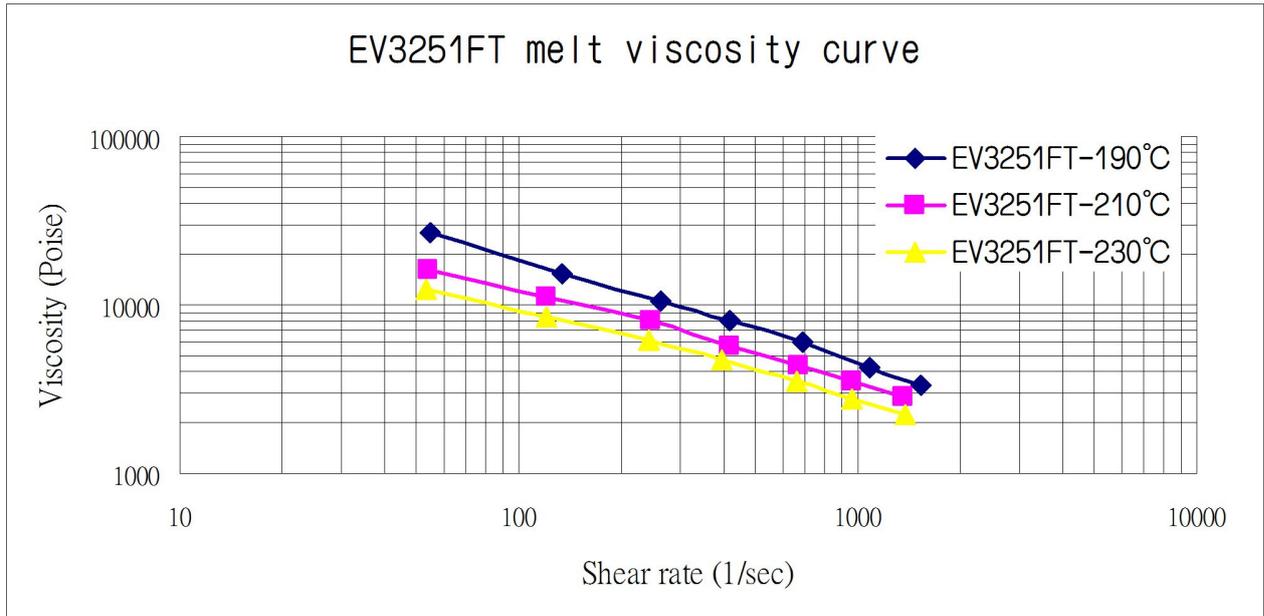
EV3251FT is a standard grade mainly designed for thermoforming application. This resin can provide more flexibility during stretch process. After modification, EVASIN EV3251FT still has excellent barrier to various gases. This resin also shows very excellent thermal stability on long run process .

General Property

| Item | unit | Test Method | Value |
|--|--|-------------|-------|
| Mechanical Properties | | | |
| Tensile strength at yield | MPa | ISO 527 | 79.2 |
| Tensile strength at break | MPa | ISO 527 | 31 |
| Young's modulus | MPa | ISO 527 | 4,430 |
| Elongation at break | % | ISO 527 | 18.2 |
| Flexural modulus | MPa | ISO 178 | 3,970 |
| Flexural strength | MPa | ISO 178 | 114 |
| Charpy impact strength | KJ/m ² | ISO 179-1 | 2.56 |
| Rockwell hardness | HRM | ISO 2039-2 | 90 |
| Density | g/cm ³ | ISO 1183 | 1.17 |
| Thermal Properties and Melt Characteristics | | | |
| Melting point | °C | ISO 11357 | 183 |
| Crystallization point | °C | ISO 11357 | 155 |
| Glass transition point | °C | ISO 11357 | 57 |
| Vicat Softening Point | °C | ISO 306 | 164 |
| Melt flow index | g/10min(2160g,190°C) | ISO 1133 | 1.9 |
| | g/10min(2160g,210°C) | ISO 1133 | 4.3 |
| Gas Barrier Properties | | | |
| O ₂ Transmission Rate at 20°C 0%RH at 20°C 65%RH at 20°C 85%RH | cm ³ .20µm/m ² .24Hrs.atm | ISO 14663-2 | 0.35 |
| | | | 0.5 |
| | | | 1.8 |
| Water Vapor Transmission Rate | cm ³ .30µm/m ² .24Hrs.atm at 40°C 90%RH | ASTM E96-E | 50 |



Melt Viscosity



Example of Processing Temperature Profile

| | Barrel 1 | Barrel 2 | Barrel 3 | Barrel 4 | Barrel 5 | Adapter | Die |
|----------|----------|----------|----------|----------|----------|---------|-----|
| EV3251FT | 180 | 200 | 205 | 215 | 220 | 215 | 215 |

