

Pro-fax

EP315J

Polypropylene
Wire and Cable Grade

Melt Flow Rate 2.6 Density 0.90



Applications

Pro-fax EP315J is a polypropylene resin designed for high-speed extrusion of primary insulation. EP315J has excellent thermal stability during processing and excellent long-term aging properties.

Processing Techniques

EP315J, like other thermoplastic polyolefin resins, can be extruded as wire and cable insulation using a conventional extruder. Below are suggested extrusion conditions and processing suggestions for EP315J. These conditions and suggestions are intended as general guidelines only, because manufacturing variables such as extruder type and size have an effect on processing of thermoplastic resins.

Suggested General Extrusion Conditions

Extruder Zone	Temperature Range	Extruder Zone	Temperature
Feed	340° - 360°F	Adapter	480° - 500°F
Zone 2	370° - 400°F	Die	480° - 500°F
Zone 3	430° - 480°F	Wire Preheat	220° - 280°F
Zone 4-X	480° - 500°F		

Additional Process Suggestions

- Die: Double angle, 10–25 percent oversized relative to outer diameter of insulated conductor being produced
- Insulation homogeneity and surface smoothness depend on maintaining adequate head pressure. If necessary, increase the head pressure by using a smaller die or tighter screen pack.

Industry Specifications

EP315J meets the requirements of the following: ASTM D 4101, Group 03, Class 4, Grade 8

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Flow Rate	2.6	g/10 min	D 1238
Density	0.900	g/cc	D 1505
Tensile Strength	3,200	psi	D 638
Tensile Stress @ Yield	3,200	psi	D 638
Elongation @ Break	600	%	D 638
Flexural Modulus, 1% Secant	150,000	psi	D 790
Low Temperature Brittleness, F ₅₀	-30	°C	D 746
Dielectric Constant @ 1 MHz	2.25		D 1531
Dissipation Factor @ 1 MHz	0.0003		D 1531

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Users should review the applicable Material Safety Data Sheet before handling the product.

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