Petrothene

GA837091

Medium Density Polyethylene
Wire and Cable Grade
Melt Index 0.75 Density 0.9345

Applications

Petrothene GA837091 is a broad molecular weight, medium density resin designed for use as a base resin in wire and cable jacketing. An antioxidant has been added to ensure thermal stability.

Regulatory Status

GA837091, like other thermoplastic polyolefin compounds, can be extruded as wire a cable jacketing using a conventional extruder. Below are suggested extrusion conditions for GA837091 These conditions are intended as general guidelines only and are not optimum values, since manufacture conditions, such as extruder type and size, affect the processing of thermoplastic compounds. For exact recommendations, contact your Equistar sales representative.

Suggested General Extrusion Conditions

Extruder Zone	Temperature Range	Extruder Zone	Temperature Range
Feed	310°-325°F (154°-163°C)	Zone 4-X	400°-425°F (204°-218°C)
Zone 2	350°-380°F (177°-193°C)	Adapter	400°-425°F (204°-218°C)
Zone 3	380°-410°F (193°-210°C)	Die	400°-425°F (204°-218°C)

Industry Specifications

GA837091 meets the requirements of the following: ASTM D 1248, Type II, Category 4, Class A, Grade E9. Federal LP390C, Type II, Class M, Category 4, Grade 2.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	0.75	g/10 min.	D 1238
Density	0.9345	g/cc	D 1505
Tensile Strength @ Break	4,100 (28.3)	psi (MPa)	D 638
Tensile Stress @ Yield	2,400 (16.5)	psi (MPa)	D 638
Elongation @ Break	790	%	D 638
Dielectric Constant @ 1 MHz	2.31		D 1531
Dissipation Factor @ 1 MHz	0.00006		D 1531
ESCR, 10% Igepal®	>1,000	hours	D 1693
Low Temperature Brittleness, F_{50}	<-76	°C	D 2240

For further information on resins and compounds for wire and cable, contact your Equistar sales or technical service representative.

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