EQUISTAR
A Lyondell Company

Petrothene®

NA951080

Low Density Polyethylene
Wire and Cable Grade
Melt Index 2.20 Density 0.920

Applications

PETROTHENE NA951080 is designed for use as a base resin for compounding material including gas-injected or chemically expanded insulation. NA951080 is a natural, low density, medium molecular weight polyethylene resin containing no additives.

Processing Techniques

NA951080 has been designed to provide excellent processability over a wide range of extrusion conditions, including the low melt temperature requirements of specialty applications like crosslinkable or foam extrusion. Specific recommendations for processing NA951080 can be made only when the application, end use requirements and type of processing equipment are known.

Suggested General Extrusion Conditions

Extruder Zone	Temperature Range	Extruder Zone	Temperature Range
Feed	280° - 300°F (138° - 149°C)	Adapter	400° - 425°F (204° - 218°C)
Zone 2	300° - 325°F (149° - 163°C)	Die	400° - 425°F (204° - 218°C)
Zone 3	375° - 400°F (190° - 204°C)	Melt Temperature	400° - 425°F (204° - 218°C)
Zone 4-X	400° - 425°F (204° - 218°C)		

Industry Specifications

NA951080 meets the requirements of the following: ASTM D 1248, Type 1, Class A, Category 3, Grades E3, Federal LP390C. Type 11. Class L. Category 3. Grade 1.

Typical Properties

Property	Nominal Value	Units	Test Method
Melt Index	2.20	g/10 min.	ASTM D 1238
Density	0.920	g/cc	ASTM D 1505
Tensile Strength @ Break	1,700 (11.7)	psi (Mpa)	ASTM D 638
Tensile Stress @ Yield	1,500 (10.4)	psi (Mpa)	ASTM D 638
Elongation @ Break	600	%	ASTM D 638
Dielectric Constant @ l MHz	2.29		ASTM D 1531
Dissipation Factor @ 1 MHz	0.00008		ASTM D 1531
Dissipation Factor @ 2 GHz	0.00006		Equistar
Low Temperature Brittleness, F_{50}	<-76	°C	ASTM D 746
Vicat Softening Point	90	°C	ASTM D 1525