

Technical Data Sheet

Lupolen 5261Z Q456 B POWDER



High Density Polyethylene

Product Description

Lupolen 5261Z Q 456 B POWDER is a high density polyethylene (HDPE) with very high melt viscosity for ram extrusion of peroxide cross-linked pipes (PEX-a). The product is supplied as a nominal 25 mesh (730 µm) powder.

Application	Drinking Water Pipe; Plumbing, Heating & Cooling; Underfloor Heating
Market	Industrial, Building & Construction; Pipe
Processing Method	Pipe
Attribute	High Density

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate					
(190 °C/5.0 kg)	0.16	g/10 min	0.16	g/10 min	ASTM D1238
(190 °C/21.6 kg)	3	g/10 min	3	g/10 min	ASTM D1238
Density, (23 °C)	0.955	g/cm ³	0.955	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus, (2% Secant)	177000	psi	1220	MPa	ASTM D790
Tensile Modulus, (1% Secant)	191000	psi	1317	MPa	ASTM D638
Tensile Stress at Break, (23 °C)	5900	psi	40.7	MPa	ASTM D638
Tensile Stress at Yield, (23 °C)	4120	psi	28.4	MPa	ASTM D638
Tensile Elongation at Break, (23 °C)	1160	%	1160	%	ASTM D638
Tensile Elongation at Yield, (23 °C)	8	%	8	%	ASTM D638
Hardness					
Shore Hardness					
(Shore D, max)	71		71		ASTM D2240
(Shore D, 15 sec)	64		64		ASTM D2240
Thermal					
Vicat Softening Temperature					
(A1)	266	°F	130	°C	ASTM D1525
(B1)	268	°F	131	°C	ASTM D1525

