

Technical Data Sheet

Lupolen 5261Z Q456 POWDER



High Density Polyethylene

Product Description

Lupolen 5261Z Q 456 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 (820 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/21.6 kg)	2.0	g/10 min	2.0	g/10 min	ASTM D1238
Density, (23 °C)	0.954	g/cm ³	0.954	g/cm ³	ASTM D1505
Mechanical					
Flexural Modulus, (2% Secant)	176000	psi	1213	MPa	ASTM D790
Tensile Modulus, (1% Secant)	192000	psi	1324	MPa	ASTM D638
Tensile Stress at Break, (23 °C)	5880	psi	40.5	MPa	ASTM D638
Tensile Stress at Yield, (23 °C)	4160	psi	27.7	MPa	ASTM D638
Tensile Elongation at Break, (23 °C)	900	%	900	%	ASTM D638
Tensile Elongation at Yield, (23 °C)	8.1	%	8.1	%	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

