

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.

**Regulatory Status**

For regulatory compliance information, see Lupolen 5261Z Q456 POWDER [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

<b>Status</b>	Commercial
<b>Availability</b>	North America
<b>Application</b>	Drinking Water Pipe; Plumbing, Heating & Cooling; Underfloor Heating
<b>Market</b>	Industrial, Building & Construction; Pipe
<b>Processing Method</b>	Pipe
<b>Attribute</b>	High Density

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
<b>Physical</b>					
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 <sup>3</sup>	0.954	g/cm <sup>3</sup>	ASTM D1505
<b>Mechanical</b>					
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
<b>Hardness</b>					
Shore Hardness					
(Shore D, max)	71		71		ASTM D2240
(Shore D, 15 sec)	64		64		ASTM D2240
<b>Thermal</b>					
Vicat Softening Temperature					
(A1)	266	°F	130	°C	ASTM D1525
(B1)	268	°F	131	°C	ASTM D1525