

Technical Data Sheet

Lupolen 5031L Q449 K

High Density Polyethylene



Product Description

Lupolen 5031 L Q 449 K is a high density polyethylene (HDPE) base material for extrusion of silane crosslinked pipes (PE-Xb).

This grade is not intended for medical and pharmaceutical applications.

This grade is supported for use in drinking water applications.

Application Drinking Water Pipe; Plumbing, Heating & Cooling

Market Pipe

Processing Method Pipe; Sheet

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(190 °C/2.16 kg)	4.0	g/10 min	ISO 1133-1
(190 °C/5.0 kg)	12.5	g/10 min	ISO 1133-1
Density	0.955	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus, (23 °C)	1100	MPa	ISO 527-1, -2
Tensile Stress at Yield, (23 °C, 50 mm/min)	26	MPa	ISO 527-1, -2
Tensile Strain at Yield, (23 °C, 50 mm/min)	10	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched, (23 °C)	5	kJ/m ²	ISO 179-1/1eA
Hardness			
Shore Hardness, (Shore D, 3 sec)	62		ISO 868
Ball Indentation Hardness, (H 132/30)	50	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(A50)	125	°C	ISO 306
(B50)	70	°C	ISO 306
Oxidation Induction Time, (210 °C)	40	min	ISO 11357-6
DSC Melting Point	131	°C	ISO 3146

Notes

These are typical property values not to be construed as specification limits.

