



Lupolen 5031 L Q 449 K

Polyethylene, High Density

Product Description

Lupolen 5031 L Q 449 K is a high density polyethylene (HDPE) base material for extrusion of silane crosslinked pipes (PE-Xb).
It is not intended for medical and pharmaceutical applications.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe
Processing Method	Extrusion Pipe Sheet and Semi Finished Products
Typical Customer Applications	Plumbing, Heating & Cooling

Typical Properties	Method	Value Unit
Physical		
Density	ISO 1183	0.955 g/cm³
Melt flow rate (MFR)	ISO 1133	
(190°C/2.16kg)		4.0 g/10 min
(190°C/5.0kg)		12.5 g/10 min
Mechanical		
Tensile Modulus (23 °C, v = 1 mm/min, Secant)	ISO 527-1, -2	1100 MPa
Tensile Stress at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	26 MPa
Tensile Strain at Yield (23 °C, v = 50 mm/min)	ISO 527-1, -2	10 %
Impact		
Charpy notched impact strength (23 °C)	ISO 179	5 kJ/m²
Hardness		
Shore hardness (Shore D (3 sec))	ISO 868	62
Ball indentation hardness (H 132/30)	ISO 2039-1	50 MPa
Thermal		
Vicat softening temperature	ISO 306	
(A50 (50°C/h 10N))		125 °C
(B50 (50°C/h 50N))		70 °C
Melting Temperature	ISO 3146	131 °C

Additional Properties

Extrusion Temperature:
Melt temperatures above 280 °C should be avoided to prevent potential degradation. In case higher temperatures are needed please contact LyondellBasell.

Notes

Typical properties; not to be construed as specifications.

