



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 Methods	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/cm ³
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/m ²
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.