

## 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).

#### Regulatory Status

For regulatory compliance information, see Lupolen 5031L Q449 K [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

This grade is not intended for medical and pharmaceutical applications.

This grade is supported for use in drinking water applications.

<b>Status</b>	Commercial: Active
<b>Availability</b>	Europe
<b>Application</b>	Drinking Water Pipe; Plumbing, Heating & Cooling
<b>Market</b>	Pipe
<b>Processing Method</b>	Pipe; Sheet

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
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 <sup>3</sup>	ISO 1183-1
<b>Mechanical</b>			
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
<b>Impact</b>			
Charpy Impact Strength - Notched, (23 °C)	5	kJ/m <sup>2</sup>	ISO 179-1/1eA
<b>Hardness</b>			
Shore Hardness, (Shore D, 3 sec)	62		ISO 868
Ball Indentation Hardness, (H 132/30)	50	MPa	ISO 2039-1
<b>Thermal</b>			
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.