

Hostalen 4731 B

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Hostalen 4731 B is a high density polyethylene (HDPE) with high melt viscosity for extrusion. The product provides excellent stress crack resistance properties (ESCR) combined very good long term hydrostatic strength, high heat- and extremely high extraction stability.

Hostalen 4731 B fulfills the requirements of DIN 16833 / ISO 24033 for PE-RT, Typ II.

Typical customer applications are underfloor heating and multilayer pipe for heating and plumbing.

The product is not being sold for use in North America.

It is not intended for medical and pharmaceutical applications.

General

Material Status	• Commercial: Active		
Literature ¹	• Processing - Mold Shrink (English) • Processing - PE Films (English) • Processing - Polyolefin Injection Molding Guide (English) • Technical Datasheet (English)		
Search for UL Yellow Card	• LyondellBasell Industries • Hostalen		
Availability	• Africa & Middle East	• Asia Pacific	• Europe
Features	• High ESCR (Stress Crack Resist.)	• High Viscosity	
Uses	• Piping		
Processing Method	• Extrusion	• Pipe Extrusion	• Sheet Extrusion

Physical	Nominal Value Unit	Test Method
Density	0.947 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)		ISO 1133
190°C/21.6 kg	12 g/10 min	
190°C/5.0 kg	0.45 g/10 min	
FNCT ³	> 14.6 day	ISO 16770

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus - Secant (23°C)	850 MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	22.0 MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	8.0 %	ISO 527-2/50

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179
-30°C	8.0 kJ/m ²	
23°C	24 kJ/m ²	

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D, 3 sec)	59	ISO 868

Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature		
--	120 °C	ISO 306/A50
--	70.0 °C	ISO 306/B50
Oxidation Induction Time (210°C)	40 min	ISO 11357-6

Additional Information	Nominal Value Unit	Test Method
MRS Classification	10.0 MPa	ISO TR 9080

Injection	Nominal Value Unit
Processing (Melt) Temp	200 to 280 °C

Extrusion	Nominal Value Unit
Melt Temperature	190 to 220 °C