

Technical Data Sheet

Hostalen 4731B



High Density Polyethylene

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 with 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 pipes for heating and plumbing.

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
Attribute	Extraction Resistant; Good Chemical Resistance; Good Creep Resistance; Good ESCR (Environmental Stress Cracking Resistance); Good Heat Aging Resistance; Good Organoleptic Properties; Weldable

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(190 °C/5.0 kg)	0.45	g/10 min	ISO 1133-1
(190 °C/21.6 kg)	9.5	g/10 min	ISO 1133-1
Density	0.947	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus, (23 °C)	850	MPa	ISO 527-1, -2
Tensile Stress at Yield, (23 °C, 50 mm/min)	22	MPa	ISO 527-1, -2
Tensile Strain at Break, (23 °C)	650	%	ISO 527-1, -2
Tensile Strain at Yield, (23 °C, 50 mm/min)	8	%	ISO 527-1, -2
MRS Classification	10	MPa	ISO 9080
FNCT, (4.0 MPa, 2% Arkopal N100, 80 °C)	>=350	hr	ISO 16770
Impact			
Charpy Impact Strength - Notched			
(23 °C)	24	kJ/m ²	ISO 179-1/1eA
(-30 °C)	8	kJ/m ²	ISO 179-1/1eA
Hardness			
Shore Hardness, (Shore D, 3 sec)	59		ISO 868
Thermal			
Vicat Softening Temperature			
(A50)	120	°C	ISO 306
(B50)	70	°C	ISO 306
Oxidation Induction Time, (210 °C)	40	min	ISO 11357-6