

## 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 fullfills 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.

<b>Application</b>	Drinking Water Pipe; Plumbing, Heating & Cooling
<b>Market</b>	Pipe
<b>Processing Method</b>	Pipe; Sheet
<b>Attribute</b>	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
<b>Physical</b>			
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 <sup>3</sup>	ISO 1183-1
<b>Mechanical</b>			
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
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C)	24	kJ/m <sup>2</sup>	ISO 179-1/1eA
(-30 °C)	8	kJ/m <sup>2</sup>	ISO 179-1/1eA
<b>Hardness</b>			
Shore Hardness, (Shore D, 3 sec)	59		ISO 868
<b>Thermal</b>			
Vicat Softening Temperature			
(A50)	120	°C	ISO 306
(B50)	70	°C	ISO 306
Oxidation Induction Time, (210 °C)	40	min	ISO 11357-6