

## Technical Data Sheet

### Akoafloor PB R509 BROWN



Polybutene-1

#### Product Description

*Akoafloor* PB R 509 brown is a highly isotactic random copolymer manufactured from butene-1 monomer. The product provides good long term hydrostatic strength also at elevated temperatures combined with extremely high flexibility.

*Akoafloor* PB R 509 complies with requirements specified in ISO 12230, DIN 16968/DIN 16969 for PB-1 pipe applications. The grade is typically used for under floor heating or surface cooling applications.

*Akoafloor* PB R 509 is available in brown colour in pellet form.

*Akoafloor* PB R 509 may not be used in the manufacture of pipe applications intended for sale or shipment to North America, without prior written approval by Seller for each specific product and application.

This grade is not intended for medical and pharmaceutical applications.

<b>Application</b>	Underfloor Heating
<b>Market</b>	Industrial, Building & Construction; Pipe
<b>Processing Method</b>	Pipe; Sheet
<b>Attribute</b>	Good Creep Resistance; Good Flexibility; Good Thermal Stability; Random Copolymer; Weldable

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (190 °C/2.16 kg)	0.70	g/10 min	ISO 1133-1
Density	0.925	g/cm <sup>3</sup>	ISO 1183-1
<b>Mechanical</b>			
Flexural Modulus	370	MPa	ISO 178
Tensile Strength at Break	35	MPa	ISO 8986-2
Tensile Strength at Yield	15	MPa	ISO 8986-2
Tensile Elongation at Break	320	%	ISO 8986-2
<b>Thermal</b>			
DSC Melting Point	123	°C	DSC
<b>Processing Parameters</b>			
Extrusion Temperature	175-190	°C	
Injection Moulding Temperature	200-240	°C	
Cooling Water Temperature	10-12	°C	
Vacuum	30-60	mbar	