

Technical Data Sheet

Akoalit PB DKG 300



Polybutene-1

Product Description

Akoalit PB DKG 300 is a glass fibre reinforced high flow polyolefin homopolymer manufactured from butene-1 monomer. It can be used where outstanding creep, high stiffness, low thermal expansion and property retention at elevated temperature are key requirements.

The grade is typically used for fitting applications such as fitting bodies, support rings, etc. in combination with hot and cold potable water pipe installations. It provides improved surface aesthetic properties combined with excellent tensile and flexural creep performance.

Akoalit PB DKG 300 is available in natural colour in pellet form.

Akoalit PB DKG 300 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.

This grade is supported for use in drinking water applications.

Application	Automotive Parts; Furniture & Buildings; Industrial; Industrial Packaging; Outdoor and Power Tools; Plumbing, Heating & Cooling; Small Appliances
Market	Automotive; Compounding; Consumer Products; Electrical / Electronics; Industrial Packaging; Industrial, Building & Construction; Rigid Packaging
Processing Method	Injection Molding
Attribute	Good Mold Release; Good Moldability; Good Organoleptic Properties; Good Thermal Stability; High Stiffness; Weldable

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	2.0	g/10 min	ISO 1133-1
Density	1.315	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	5200	MPa	ISO 527-1, -2
Tensile Strength at Break	72	MPa	ISO 8986-2
Tensile Strength at Yield	80	MPa	ISO 8986-2
Tensile Elongation at Break	4.5	%	ISO 8986-2
Impact			
Charpy Impact Strength - Notched			
(0 °C)	14	kJ/m ²	ISO 179
(-20 °C)	11	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(0 °C, Type 1, Edgewise)	60	kJ/m ²	ISO 179
(-20 °C, Type 1, Edgewise)	55	kJ/m ²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	85	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B50)	116	°C	ISO 306
Processing Parameters			
Injection Moulding Temperature	180-220	°C	