

DATASHEET

POLYPROPYLENE HOMOPOLYMER (PPH)

PPH is a low-density material that offers high chemical resistance, stiffness and melting temperature. PPH also boasts a good upper operating temperature and high dynamic stability, however at low temperatures PPH can become brittle.

Applications

- Chemical Tanks
- Cutting Boards
- Pumps
- Valves
- Gaskets

Availability

- Colour – Natural & Beige
- Type – Sheets, Rods & Tubes
- Regularly produced in a wide variety of thicknesses

Typical Properties

General Properties	Method	Unit	Test Result
Physical Properties			
Specific Gravity	ISO 1183	g/cm ³	0.91
Water Absorption	ISO 62	%	0.01
Maximum Service – Higher Temp Limit	-	°C	100
Maximum Service – Lower Temp Limit	-	°C	0
Mechanical Properties			
Tensile Strength at Yield	ISO 527	MPa	33
Elongation at Yield	ISO 527	%	8
Tensile Strength at Break	ISO 527	MPa	-
Elongation at Break	ISO 527	%	80
Impact Strength	ISO 179	kJ/m ²	No break
Notch Impact Strength	ISO 179	kJ/m ²	9
Ball Indentation / Rockwell Hardness	ISO 2039-1	MPa	70
Shore - D	DIN 53505	-	72
Flexural Strength	ISO 178	MPa	-
Modulus of Elasticity	ISO 527	MPa	1700
Thermal Properties			
Vicat Softening Point VST/B/50	ISO 306	°C	-
Heat Deflection Temperature HDT/B	ISO 75	°C	-
Heat Deflection Temperature HDT/A	-	°C	-

Coefficient / Linear Thermal Expansion	DIN 53752	$K^{-1} \cdot 10^{-6}$	1.6
Thermal Conductivity at 20°C	DIN 52612	W/(m*k)	0.22
Electrical Properties			
Volume Resistivity	VDE 0303	$\Omega \times m$	-
Surface Resistivity	-	Ω	10(14)
Dielectric Constant at 1MHz	-	-	-
Dielectric Loss Factor at 1MHz	DIN 53483	-	-
Dielectric Strength	VDE 0303	kV/mm	52
Tracking Resistance	IEC 60112	-	-
Additional Information			
Bondability	-	-	Yes
Food Compliance	FDA	-	Yes
Flammability	UL 94	-	HB