

PPH - FR

Material Information



PPH - FR

Product full identity:

Polypropylene Homopolymer - Fire Retardant

PPH - FR has most of the attributes of standard PPH, with the added advantage of being a fire retardant grade. 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.

Properties

- Improved fire resistance
- Wide temperature range (+80 to -0°C)
- Excellent chemical resistance
- Lightweight and weldable
- Very low moisture absorption <0.1%

Applications

- Heating ventilation
- Air conditioning systems

Forms



Sheet



Weld Rod

PPH - FR

Technical Properties

Physical	Unit	Test Method	Result
Specific gravity	g/cm ³	DIN EN ISO 1183	1.04
Water absorption until saturation at 23°C	%	-	-
Maximum service temp. Upper temp limit – short term	°C	-	100
Maximum service temp. Upper temp limit – long term	°C	-	-
Lower temp limit	°C	-	0
Mechanical	Unit	Test Method	Result
Tensile strength	MPa	DIN EN ISO 527	25
Elongation at yield	%	DIN EN ISO 527	8
Tensile strength at break	MPa	-	-
Unnotched impact strength	kJ/m ²	DIN EN ISO 179	No break
Notch impact strength	kJ/m ²	DIN EN ISO 180/A	35
Ball indentation / Rockwell hardness	MPa	DIN EN ISO 2039-1	70
Shore-D		DIN EN ISO 868	67
Flexural modulus of elasticity	MPa	-	1400
Tensile modulus of elasticity	MPa	DIN EN ISO 527	1600
Thermal	Unit	Test Method	Result
Vicat-softening point VST/B/50	°C	ISO 306/A	158
Heat deflection temperature HDT/B	°C	ISO 75/B	97
Coefficient of linear thermal expansion 23 – 100°C	m/(m.K)	ISO 11359-1	1.6 x 10 ⁻⁴
Thermal conductivity at 23°C	W/mK	-	-
Electrical	Unit	Test Method	Result
Volume resistivity	Ω x m	-	-
Surface resistivity	Ω	DIN IEC 60093	≥10 ¹³
Insulation resistivity	Ω . cm	-	-
Dielectric constant at 1MHz		-	-
Dielectric loss factor at 1MHz		-	-
Dielectric strength	kV/mm	DIN IEC 60243-1	22
Comparative tracking index (CTI)		-	-
Additional Data	Unit	Test Method	Result
Bondability		-	-
Food compliance – FDA		FDA	No
Food compliance – EU		EU 10/2011	No
Antistatic		-	-
Flammability	Unit	Test Method	Result
Fire performance		DIN 4102 UL 94 (1.5mm) UL 94 (3mm) FMV SS302	B1 HB V2 Passes
Optical	Unit	Test Method	Result
N/A	N/A	N/A	N/A

All information provided in this Product Datasheet is for guide purposes only. The data has been taken from standard test results provided by our manufacturers.