POLYBEST 6 PD GF50 black

Polyamide 6

POLYMA Kunststoff GmbH & Co. KG

Message:

POLYBEST 6 PD GF50 black is a Polyamide 6 (Nylon 6) product filled with 50% glass fiber. It can be processed by injection molding and is available in Europe. Primary characteristic: flame rated.

Filler / Reinforcement Glass Fiber,50% Filler by Weight Appearance Black Processing Method Unjection Holding Physical Dry Conditioned Unit Test Method Specific Gravity 1.57 Q'cm³ ASTM D792 Molding Shrinkage - Flow 0.15 % ASTM D955 Water Absorption (23°C, 24 br) W ASTM D950 Hardness Dry Conditioned Unit Test Method Rescale) 190 ASTM D638 ASTM D638 Flexual Modulus 13500 8500 MPa ASTM D638 Flexual Modulus 13500	General Information				
Processing Method	Filler / Reinforcement		Glass Fiber,50% Filler by Weight		
Physical Dry Conditioned Unit Test Method Specific Gravity 1.57 g/cm² ASTM D792 Molding Shrinkage - Flow 0.15 % ASTM D955 Water Absorption (23°C, 24 hr) % ASTM D570 Hardness Dry Conditioned Unit Test Method Rockwell Hardness (R-Scale) 120 110 ASTM D785 Mechanical Dry Conditioned Unit Test Method Tensile Strength (Break) 230 180 MPa ASTM D638 Tensile Elongation (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D790 Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 Iz/m² ISO 180/1U Thermal Dry Conditioned Unit Test Method Deflection Temperature 220 'C <td>Appearance</td> <td></td> <td>Black</td> <td></td> <td></td>	Appearance		Black		
Specific Gravity 1.57 g/cm² ASTM D792 Molding Shrinkage - Flow 0.15 % ASTM D955 Water Absorption (23°C, 24 hr) % ASTM D570 Hardness Dry Conditioned Unit Test Method Rockwell Hardness (R-Scale) 120 110 ASTM D785 Mechanical Dry Conditioned Unit Test Method Tensile Strength (Break) 230 180 MPa ASTM D638 Tensile Elongation (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D790 Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 KJ/m² ISO 180/IU Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load 220 °C STM D648 0.45 MPa, Unannealed 215 °C DSC <td>Processing Method</td> <td></td> <td>Injection Molding</td> <td></td> <td></td>	Processing Method		Injection Molding		
Molding Shrinkage - Flow 0.15 % ASTM D955 Water Absorption (23°C, 24 hr) % ASTM D570 Hardness Dry Conditioned Unit Test Method Rockwell Hardness (R-Scale) 120 110 ASTM D785 Mechanical Dry Conditioned Unit Test Method Tensile Strength (Break) 230 180 MPa ASTM D638 Tensile Strength (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D790 Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 kl/m² ISO 180/1U Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load 220 °C ASTM D648 0.45 MPa, Unannealed 215 °C DSC Electrical Dry Conditioned Unit Test Method <	Physical	Dry	Conditioned	Unit	Test Method
Water Absorption (23°C, 24 hr) 0.80 % ASTM D570 Hardness Dry Conditioned Unit Test Method Rockwell Hardness (R-Scale) 120 110 ASTM D785 Mechanical Dry Conditioned Unit Test Method Tensile Strength (Break) 230 180 MPa ASTM D638 Tensile Elongation (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D638 Unnotched Izod Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 kl/m² ISO 180/1U Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load 220 °C 0.45 MPa, Unannealed 215 °C Melting Temperature 222 °C DSC	Specific Gravity	1.57		g/cm³	ASTM D792
hr) 0.80 % 6 ASTM D570 Hardness Dry Conditioned Unit Test Method Rockwell Hardness (R-Scale) 120 110 ASTM D785 Mechanical Dry Conditioned Unit Test Method Tensile Strength (Break) 230 180 MPa ASTM D638 Tensile Elongation (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D790 Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength Py Conditioned Unit Test Method Unnotched Izod Impact Strength Dry Conditioned Unit Test Method Unnotched Izod Impact Strength Py Conditioned Unit Test Method Unit Test Method Unfelection Temperature Under Load 220 °C 1.8 MPa, Unannealed 220 °C Melting Temperature 222 °C Melting Temperature 222 °C Melting Temperature 222 °C Melting Temperature 222 °C Melting Temperature 1.0E+13 1.0E+11 ohms ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms cm ASTM D257 Comparative Tracking Index 5.500 °C Conditioned Unit Test Method Unit Test Method	Molding Shrinkage - Flow	0.15		%	ASTM D955
Rockwell Hardness Rockwell Hardness ASTM D785 (R-Scale) 120 110 ASTM D785 Mechanical Dry Conditioned Unit Test Method Tensile Strength (Break) 230 180 MPa ASTM D638 Tensile Elongation (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D790 Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 kJ/m² ISO 180/IU Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load 220 °C ASTM D648 0.45 MPa, Unannealed 215 °C DSC Helting Temperature 222 °C DSC Electrical Dry Conditioned Unit Test Method Surface Resistivity 1.0E+13 1.0E+11 ohms · cm ASTM D257 Comp	•	0.80		%	ASTM D570
(R-Scale) 120 110 ASTM D785 Mechanical Dry Conditioned Unit Test Method Tensile Strength (Break) 230 180 MPa ASTM D638 Tensile Elongation (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D790 Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 kI/m² ISO 180/1U Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load 220 °C 1.8 MPa, Unannealed 220 °C Melting Temperature 222 °C Melting Temperature 222 °C Melting Temperature 222 °C Melting Temperature 222 °C Multing Test Method String Test Method Surface Resistivity 1.0E+13	Hardness	Dry	Conditioned	Unit	Test Method
Tensile Strength (Break) 230 180 MPa ASTM D638 Tensile Elongation (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D790 Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 kl/m² ISO 180/1U Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load 220 °C 1.8 MPa, Unannealed 215 °C Melting Temperature 222 °C DSC Electrical Dry Conditioned Unit Test Method Surface Resistivity 1.0E+13 1.0E+11 ohms·cm ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms·cm ASTM D257 Comparative Tracking Index > 500 V VDE 0303/1 Flanmability Dry Conditioned Unit Test Method <		120	110		ASTM D785
Tensile Elongation (Break) 2.0 3.0 % ASTM D638 Flexural Modulus 13500 8500 MPa ASTM D790 Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 kJ/m² ISO 180/1U Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load 220 °C 1.8 MPa, Unannealed 215 °C Melting Temperature 222 °C DSC Electrical Dry Conditioned Unit Test Method Surface Resistivity 1.0E+13 1.0E+11 ohms ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms cm ASTM D257 Comparative Tracking Index > 500 V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	Mechanical	Dry	Conditioned	Unit	Test Method
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Impact Dry Conditioned Unit Test Method Unnotched Izod Impact Strength > 90 kJ/m² ISO 180/1U Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load Unit Test Method 0.45 MPa, Unannealed 220 °C 1.8 MPa, Unannealed 215 °C Melting Temperature 222 °C DSC Electrical Dry Conditioned Unit Test Method Surface Resistivity 1.0E+13 1.0E+11 ohms cm ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms cm ASTM D257 Comparative Tracking Index > 500 V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	Tensile Elongation (Break)	2.0	3.0	%	ASTM D638
Unnotched Izod Impact Strength > 90 kJ/m² ISO 180/1U Thermal Dry Conditioned Unit Test Method Deflection Temperature Under Load Zeo °C 1.8 MPa, Unannealed 220 °C 1.8 MPa, Unannealed 215 °C Melting Temperature 222 °C DSC Electrical Dry Conditioned Unit Test Method Surface Resistivity 1.0E+13 1.0E+11 ohms · cm ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms · cm ASTM D257 Comparative Tracking Index > 500 V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	Flexural Modulus	13500	8500	МРа	ASTM D790
Strength> 90kJ/m²ISO 180/1UThermalDryConditionedUnitTest MethodDeflection Temperature Under Load°C0.45 MPa, Unannealed220°C1.8 MPa, Unannealed215°CMelting Temperature222°CDSCElectricalDryConditionedUnitTest MethodSurface Resistivity1.0E+131.0E+11ohms cmASTM D257Volume Resistivity1.0E+151.0E+11ohms cmASTM D257Comparative Tracking Index> 500VVDE 0303/1FlammabilityDryConditionedUnitTest Method	Impact	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load	•	> 90		kJ/m²	ISO 180/1U
Under Load O.45 MPa, Unannealed 220 °C 1.8 MPa, Unannealed 215 °C Melting Temperature 222 °C DSC Electrical Dry Conditioned Unit Test Method Surface Resistivity 1.0E+13 1.0E+11 ohms cm ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms cm ASTM D257 Comparative Tracking Index > 500 °C V V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	Thermal	Dry	Conditioned	Unit	Test Method
1.8 MPa, Unannealed 215 °C Melting Temperature 222 °C DSC Electrical Dry Conditioned Unit Test Method Surface Resistivity 1.0E+13 1.0E+11 ohms ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms·cm ASTM D257 Comparative Tracking Index > 500 V V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	·				ASTM D648
Melting Temperature222°CDSCElectricalDryConditionedUnitTest MethodSurface Resistivity1.0E+131.0E+11ohmsASTM D257Volume Resistivity1.0E+151.0E+11ohms·cmASTM D257Comparative Tracking Index> 500VVDE 0303/1FlammabilityDryConditionedUnitTest Method	0.45 MPa, Unannealed	220		°C	
Electrical Dry Conditioned Unit Test Method Surface Resistivity 1.0E+13 1.0E+11 ohms ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms·cm ASTM D257 Comparative Tracking Index > 500 V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	1.8 MPa, Unannealed	215		°C	
Surface Resistivity 1.0E+13 1.0E+11 ohms ASTM D257 Volume Resistivity 1.0E+15 1.0E+11 ohms·cm ASTM D257 Comparative Tracking Index > 500 V V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	Melting Temperature	222		°C	DSC
Volume Resistivity 1.0E+15 1.0E+11 ohms cm ASTM D257 Comparative Tracking Index > 500 V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	Electrical	Dry	Conditioned	Unit	Test Method
Comparative Tracking Index > 500 V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	Surface Resistivity	1.0E+13	1.0E+11	ohms	ASTM D257
Index > 500 V VDE 0303/1 Flammability Dry Conditioned Unit Test Method	Volume Resistivity	1.0E+15	1.0E+11	ohms·cm	ASTM D257
		> 500		V	VDE 0303/1
Flame Rating (1.60 mm) HB UL 94	Flammability	Dry	Conditioned	Unit	Test Method
	Flame Rating (1.60 mm)	НВ			UL 94

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