Ultramid® B3EG6

PA6-GF30 BASF

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	35 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	9500 / 6200	MPa	ISO 527
Stress at Break	185 / 115	MPa	ISO 527
Strain at Break	3.5 / 8	%	ISO 527
Impact Strength (Charpy), +23°C	95 / 110	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	80 / -	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 30	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	11 / -	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	8600 / 5000	MPa	ISO 178
Flexural strength	270 / 180	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	15.5 / 20	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	11 / -	kJ/m²	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	80 / -	kJ/m²	ISO 180/1U
ASTM Data			
Notched Impact Strength (Izod), 1/8 in	150 / 300	J/m	ASTM D 256

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	210 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	22 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	106 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.6 / *	mm	-
UL recognition	yes / *	-	-
ASTM Data			
Thermal Conductivity, solid state	0.36	W/(m K)	DIN 52612-1
Specific Heat	1500	J/(kg K)	-

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.8 / 6.8	-	IEC 62631-2-1
Dissipation Factor, 1MHz	230 / 2200	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E10	Ohm	IEC 62631-3-2
Electric Strength	39 / 35	kV/mm	IEC 60243-1
Comparative tracking index	- / 575	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6.6 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m³	ISO 1183
Bulk density	700	kg/m³	-

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	140 / *	cm³/g	ISO 307, 1157, 1628

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 90	°C	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Melt temperature	270 - 290	°C	-

Characteristics

Processing
Injection Molding, Other Extrusion

Applications
Automotive, Electrical and Electronical

Delivery form
Pellets

Disclaimer

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