

Ultramid® B3U31G4
PA6-GF20

BASF

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	200 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	6000 / 3000	MPa	ISO 527
Stress at Break	85 / 35	MPa	ISO 527
Strain at Break	2.5 / 7	%	ISO 527
Impact Strength (Charpy), +23°C	25 / 65	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	25 / 20	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	3 / 4.4	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	5900 / 2900	MPa	ISO 178
Flexural strength	140 / 60	MPa	ISO 178

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)	180 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	41 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	86 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-2 / *	class	UL 94
Thickness tested	1.5 / *	mm	-
UL recognition	yes / *	-	-
Burning Behav. at thickness h	V-2 / *	class	UL 94
Thickness tested	0.7 / *	mm	-
UL recognition	yes / *	-	-
Glow Wire (GWFI, Flammability Index)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1	mm	-

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.9 / 4.6	-	IEC 62631-2-1
Dissipation Factor, 1MHz	200 / 1000	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / 1E9	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E12	Ohm	IEC 62631-3-2
Comparative tracking index	- / 450	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6.8 / *	%	Sim. to ISO 62
Humidity absorption	2.4 / *	%	Sim. to ISO 62
Density	1320 / -	kg/m³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	125 / *	cm³/g	ISO 307, 1157, 1628

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	250 - 275	°C	-
Mold temperature	80 - 90	°C	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Melt temperature	250 - 275	°C	-

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Characteristics

Processing

Injection Molding, Other Extrusion

Special Characteristics

Flame retardant, Halogen-free

Delivery form

Pellets