

Ultramid® B3U42G6 DC
PA6-GF30

BASF

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	40 / *	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	11000 / 7700	MPa	ISO 527
Stress at Break	140 / 95	MPa	ISO 527
Strain at Break	2.7 / 4.5	%	ISO 527
Impact Strength (Charpy), +23°C	60 / 60	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	55 / 50	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	8 / 10	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	7.5 / 7	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	11000 / 7600	MPa	ISO 178
Flexural strength	225 / 160	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)	206 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	24 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	82 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at thickness h	V-0 / *	class	UL 94
Thickness tested	0.8 / *	mm	-
Glow Wire (GWFI, Flammability Index)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	0.75	mm	-

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.8 / 4.4	-	IEC 62631-2-1
Dissipation Factor, 1MHz	170 / 640	E-4	IEC 62631-2-1
Volume Resistivity	1E12 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E14	Ohm	IEC 62631-3-2
Electric Strength	40 / 35	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	5.3 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1450 / -	kg/m³	ISO 1183
Bulk density	700	kg/m³	-

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	120 / *	cm³/g	ISO 307, 1157, 1628

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	270 - 290	°C	-
Mold temperature	70 - 90	°C	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Melt temperature	270 - 290	°C	-

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Characteristics

Processing

Injection Molding, Other Extrusion

Features

Color Stability

Delivery form

Pellets

Applications

Electrical and Electronical

Special Characteristics

Flame retardant, Halogen-free