

**Ultramid® B3EG6**  
PA6-GF30

BASF

Rheological properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	35 / *	cm <sup>3</sup> /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
<b>ISO Data</b>			
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/m <sup>2</sup>	ISO 179/1eU
Impact Strength (Charpy), -30°C	80 / -	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 30	kJ/m <sup>2</sup>	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	11 / -	kJ/m <sup>2</sup>	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/m <sup>2</sup>	ISO 180/1A
Notched Impact Strength (Izod)	11 / -	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	80 / -	kJ/m <sup>2</sup>	ISO 180/1U
<b>ASTM Data</b>			
Notched Impact Strength (Izod), 1/8 in	150 / 300	J/m	ASTM D 256

Thermal Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
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 / *	-	-
<b>ASTM Data</b>			
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
<b>ISO Data</b>			
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
<b>ISO Data</b>			
Water Absorption	6.6 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m <sup>3</sup>	ISO 1183
Bulk density	700	kg/m <sup>3</sup>	-

Material Specific Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Viscosity number	140 / *	cm <sup>3</sup> /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

### Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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