

Ultramid® B3EG10 SI BK23322

PA6-GF50

BASF

Glass fiber-reinforced injection moulding grade, with excellent surface quality especially suitable for the production of visible parts with very high stiffness. Optimum surface quality is generally obtained at a very high injection speed.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	20 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	16800 / 10300	MPa	ISO 527
Stress at Break	230 / 145	MPa	ISO 527
Strain at Break	2.6 / 5.6	%	ISO 527
Impact Strength (Charpy), +23°C	90 / 90	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	65 / 65	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 20	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	13 / 13	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	216 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	200 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	4.8 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1590 / -	kg/m³	ISO 1183
Bulk density	700	kg/m³	-

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	130 / *	cm³/g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	300	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.05	%	-
Melt temperature	280 - 300	°C	-
Mold temperature	80 - 110	°C	-

Characteristics

Processing

Injection Molding

Additives

Lubricants, Release agent

Delivery form

Pellets, Black

Special Characteristics

Heat aging stabilized

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Injection Molding

PREPROCESSING

Pre/Post-processing, max. allowed water content: .05 %

Pre/Post-processing, Pre-drying, Temperature: 80 °C

Pre/Post-processing, Pre-drying, Time: 4 - 8 h

PROCESSING

injection molding, Melt temperature, range: 280 - 300 °C

injection molding, Melt temperature, recommended: 290 °C

injection molding, Mold temperature, range: 80 - 110 °C

injection molding, Mold temperature, recommended: 100 °C

injection molding, Dwell time, thermoplastics: 10 min
