Ultramid® B3EG6 SI UN

PA6-GF30 BASF

A glass fibre reinforced injection moulding grade with excellent surface quality, especially suitable for the production of visible parts with high stiffness.
Optimum surface quality is generally obtained at very high injection speed.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	50 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	9700 / 5650	MPa	ISO 527
Stress at Break	185 / 105	MPa	ISO 527
Strain at Break	3.2 / 5.6	%	ISO 527
Impact Strength (Charpy), +23°C	75 / 90	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	65 / 60	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	11 / 15	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	9 / 9	kJ/m²	ISO 179/1eA

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)	202 / *	°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	6.75 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1350 / -	kg/m³	ISO 1183

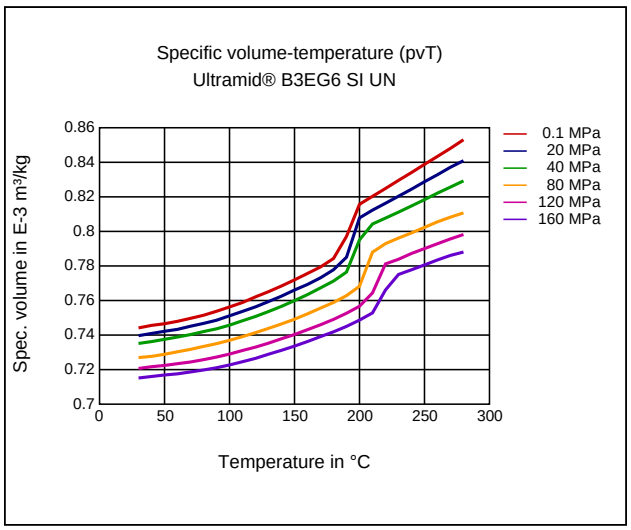
Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	130 / *	cm³/g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	290	°C	ISO 294
Injection Molding, mold temperature	90	°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	260 - 280	°C	-
Mold temperature	80 - 110	°C	-

Diagrams

Specific volume-temperature (pvT)



Characteristics

Processing
Injection Molding

Additives
Lubricants, Release agent

Delivery form
Pellets, Natural Color

Special Characteristics
Heat aging stabilized

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: 260 - 280 °C
injection molding, Melt temperature, recommended: 270 °C
injection molding, Mold temperature, range: 80 - 110 °C
injection molding, Mold temperature, recommended: 100 °C
injection molding, Dwell time, thermoplastics: 10 min

Chemical Media Resistance

Acids

✔ Acetic Acid (5% by mass) (23°C)

Disclaimer

Important: irrespective of product type or designation, ALBIS does not recommend or support the use of any products it supplies which fall into the following medical, pharmaceutical or diagnostic application categories:

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

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