

Ultramid® A3Z4
PA66

BASF

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	1900 / 950	MPa	ISO 527
Yield stress	50 / 45	MPa	ISO 527
Yield strain	4.6 / 170	%	ISO 527
Nominal strain at break	30 / >50	%	ISO 527
Impact Strength (Charpy), +23°C	no break / no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break / no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	88 / 123	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	23 / 21	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	260 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	65 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	170 / *	°C	ISO 75-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.1 / 5	-	IEC 62631-2-1
Dissipation Factor, 1MHz	200 / 1000	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	7.5 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1080 / -	kg/m³	ISO 1183
Bulk density	700	kg/m³	-

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	280 - 300	°C	-
Mold temperature	70 - 80	°C	-

Characteristics

Processing

Injection Molding

Special Characteristics

Impact modified

Delivery form

Pellets

Applications

Automotive