

Ultramid® A4K
PA66

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	-

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	3200 / 1200	MPa	ISO 527
Yield stress	85 / 50	MPa	ISO 527
Yield strain	4.2 / 20	%	ISO 527
Nominal strain at break	>50 / >50	%	ISO 527
Tensile Creep Modulus, 1000h	* / 700	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	no break / no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	5.7 / 27	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	5 / -	kJ/m²	ISO 179/1eA
Notched Impact Strength (Izod), 23°C	6 / no break	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	7 / 7	kJ/m²	ISO 180/1A
Temperature	-30	°C	-

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)	75 / *	°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	85 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-2 / *	class	UL 94
Thickness tested	1.6 / *	mm	-

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.2 / 5	-	IEC 62631-2-1
Dissipation Factor, 1MHz	260 / 2000	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E10	Ohm	IEC 62631-3-2
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	9 / *	%	Sim. to ISO 62
Humidity absorption	3.1 / *	%	Sim. to ISO 62
Density	1130 / -	kg/m³	ISO 1183
Bulk density	700	kg/m³	-

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	190 / *	cm³/g	ISO 307, 1157, 1628

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	280 - 300	°C	-
Mold temperature	60 - 80	°C	-

Characteristics

Processing

Injection Molding

Features

Tribologic Grade

Delivery form

Pellets

Applications

Automotive

Disclaimer

Liability Exclusion

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