

Ultramid® A3WG10 CR bk564
PA66-GF50

BASF

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	10 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	16400 / 11500	MPa	ISO 527
Stress at Break	230 / 160	MPa	ISO 527
Strain at Break	2.5 / 4.1	%	ISO 527
Impact Strength (Charpy), +23°C	90 / 93	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	80 / 85	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	14 / 18	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	12 / 14	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	15500 / 11300	MPa	ISO 178
Flexural Modulus	370 / 260	MPa	ISO 178

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)	255 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	260 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	16 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	80 / *	E-6/K	ISO 11359-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.7 / 10.3	-	IEC 62631-2-1
Relative permittivity, 1MHz	4.3 / 4.9	-	IEC 62631-2-1
Dissipation Factor, 100Hz	140 / 2230	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	180 / 730	E-4	IEC 62631-2-1
Volume Resistivity	4E12 / 2E9	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 2E16	Ohm	IEC 62631-3-2
Electric Strength	33 / 30	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	4 / *	%	Sim. to ISO 62
Humidity absorption	1.2 / *	%	Sim. to ISO 62
Density	1570 / -	kg/m³	ISO 1183
Bulk density	700	kg/m³	-

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	300	°C	ISO 294
Injection Molding, mold temperature	100	°C	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	280 - 310	°C	-
Mold temperature	80 - 100	°C	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Melt temperature	280 - 310	°C	-

Characteristics

Processing

Injection Molding, Other Extrusion

Features

Thermal Stability

Delivery form

Pellets, Black

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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