

Ultramid® S3W Balance
PA610

BASF

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	84 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	1.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.6 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	2440 / 1600	MPa	ISO 527
Yield stress	67 / 55	MPa	ISO 527
Yield strain	4.3 / 17	%	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	3.8 / 3.9	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	4.5 / 3.5	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	2200 / 1500	MPa	ISO 178

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)	60 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	155 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	94.5 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	109 / *	E-6/K	ISO 11359-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Volume Resistivity	4E12 / 8E9	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 2E14	Ohm	IEC 62631-3-2
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	3.6 / *	%	Sim. to ISO 62
Humidity absorption	1.4 / *	%	Sim. to ISO 62
Density	1080 / -	kg/m³	ISO 1183
Bulk density	700	kg/m³	-

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	155 / *	cm³/g	ISO 307, 1157, 1628

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	250 - 270	°C	-
Mold temperature	40 - 60	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets