

Ultrason® E 2010 MR SW 10111
PESU

BASF

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	70	cm³/10min	ISO 1133
Temperature	360	°C	-
Load	10	kg	-
Molding shrinkage, parallel	0.8	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2650	MPa	ISO 527
Yield stress	85	MPa	ISO 527
Yield strain	6.9	%	ISO 527
Tensile Creep Modulus, 1000h	2700	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	6.5	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	7	kJ/m²	ISO 179/1eA
Notched Impact Strength (Izod), 23°C	6.5	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	7	kJ/m²	ISO 180/1A
Temperature	-30	°C	-
Ball Indentation Hardness	154	MPa	ISO 2039-1

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Glass Transition Temperature (10°C/min)	225	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	205	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	52	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0	class	UL 94
Thickness tested	1.6	mm	-
Burning Behav. at thickness h	V-0	class	UL 94
Thickness tested	3.0	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.9	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.8	-	IEC 62631-2-1
Dissipation Factor, 100Hz	17	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	140	E-4	IEC 62631-2-1
Volume Resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric Strength	37	kV/mm	IEC 60243-1
Comparative tracking index	100	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	2.2	%	Sim. to ISO 62
Humidity absorption	0.8	%	Sim. to ISO 62
Density	1370	kg/m³	ISO 1183

Material Specific Properties	Value	Unit	Test Standard
ISO Data			
Viscosity number	56	cm³/g	ISO 307, 1157, 1628

Characteristics

Processing

Injection Molding, Other Extrusion, Blow Molding

Delivery form

Pellets, Black

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