

**DAIAMID® X4442**

PA12

Daicel-Evonik Ltd.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	8	cm <sup>3</sup> /10min	ISO 1133
Temperature	230	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	520	MPa	ISO 527
Yield stress	25	MPa	ISO 527
Yield strain	21	%	ISO 527
Stress at break	47	MPa	ISO 527
Strain at break	>50	%	ISO 527
Flexural modulus, 23°C	460	MPa	ISO 178
Charpy impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	9	kJ/m <sup>2</sup>	ISO 179/1eA
Rockwell hardness	R84	-	ISO 2039-2

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting temperature, 10°C/min	175	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	50	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	100	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	180	E-6/K	ISO 11359-1/-2

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Volume resistivity	7E7	Ohm*m	IEC 62631-3-1
Electric strength	32	kV/mm	IEC 60243-1

Other properties	Value	Unit	Test Standard
Water absorption	1.2	%	Sim. to ISO 62
Humidity absorption	0.6	%	Sim. to ISO 62
Density	1010	kg/m <sup>3</sup>	ISO 1183

**Characteristics****Processing**

Coating

**Features**

Copolymer

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America