

DSM Engineering Plastics - Property Data

Xantar® MX 2042 FD

PC-unfilled

Steam Resistant, Food Grade

Properties	Typical Data	Unit	Test Method
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RHEOLOGICAL PROPERTIES

Melt volume-flow rate	7	cm ³ /10min	ISO 1133
Temperature	300	°C	ISO 1133
Load	1.2	kg	ISO 1133
Molding shrinkage (parallel)	0.6	%	ISO 294-4

MECHANICAL PROPERTIES

Tensile modulus	2300	MPa	ISO 527-1/-2
Yield stress	60	MPa	ISO 527-1/-2
Yield strain	6	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Flexural modulus	2400	MPa	ISO 178
Flexural strength	90	MPa	ISO 178
Izod notched impact strength (23°C)	80	kJ/m ²	ISO 180/4A
Rockwell hardness, M scale	70	-	ISO 2039-2

THERMAL PROPERTIES

Temp. of deflection under load (1.80 MPa)	135	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	145	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	0.65	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.6 mm nom. thickn.	V-2	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10

ELECTRICAL PROPERTIES

Relative permittivity (100Hz)	3	-	IEC 60250
Relative permittivity (1 MHz)	2.9	-	IEC 60250
Dissipation factor (100 Hz)	6.6	E-4	IEC 60250
Dissipation factor (1 MHz)	92	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Surface resistivity	>1E15	Ohm	IEC 60093
Electric strength	29	kV/mm	IEC 60243-1
Comparative tracking index	225	-	IEC 60112

OTHER PROPERTIES

Water absorption	0.35	%	Sim. to ISO 62
Density	1200	kg/m ³	ISO 1183
Light transmittance	89	%	ASTM D1003

MATERIAL SPECIFIC PROPERTIES

Limiting Viscosity Number	52	cm ³ /g	ISO 1628-4
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DSM Product

Unlimited. DSM

