

DSM Engineering Plastics - Property Data

Xantar® SF 22

PC-unfilled

Structural Foam

Properties	Typical Data	Unit	Test Method
------------	--------------	------	-------------

RHEOLOGICAL PROPERTIES

Melt volume-flow rate	5	cm³/10min	ISO 1133
Temperature	300	°C	ISO 1133
Load	1.2	kg	ISO 1133

MECHANICAL PROPERTIES

Tensile modulus	2000	MPa	ISO 527-1/-2
Yield stress	37	MPa	ISO 527-1/-2
Yield strain	6	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Flexural modulus	2200	MPa	ISO 178
Flexural strength	70	MPa	ISO 178

THERMAL PROPERTIES

Temp. of deflection under load (1.80 MPa)	127	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.15	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.6 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	4.8	mm	IEC 60695-11-10
Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	6	mm	IEC 60695-11-10
Burning Behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	4.8	mm	IEC 60695-11-20
Oxygen index	35	%	ISO 4589-1/-2
Ball pressure temperature	125	°C	IEC 60695-10-2

ELECTRICAL PROPERTIES

Relative permittivity (100Hz)	3.3	-	IEC 60250
Relative permittivity (1 MHz)	3.3	-	IEC 60250
Dissipation factor (100 Hz)	8	E-4	IEC 60250
Dissipation factor (1 MHz)	90	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Surface resistivity	>1E15	Ohm	IEC 60093
Comparative tracking index	175	-	IEC 60112
Comparative tracking index (PLC)	4	class	UL 746A

OTHER PROPERTIES

Water absorption	0.35	%	Sim. to ISO 62
Density	1220	kg/m³	ISO 1183
Density (foamed)	950	kg/m³	ISO 1183

MATERIAL SPECIFIC PROPERTIES

Limiting Viscosity Number	55	cm³/g	ISO 1628-4
---------------------------	----	-------	------------

DSM Product

Unlimited. DSM

