

DSM Engineering Plastics - Property Data

Xantar® C CM 406

(PC+ABS)-unfilled...

General purpose, Vicat 120°C

Properties	Typical Data	Unit	Test Method
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RHEOLOGICAL PROPERTIES

Melt volume-flow rate	24	cm ³ /10min	ISO 1133
Temperature	260	°C	ISO 1133
Load	5	kg	ISO 1133
Molding shrinkage (parallel)	0.6	%	ISO 294-4

MECHANICAL PROPERTIES

Tensile modulus	2200	MPa	ISO 527-1/-2
Yield stress	50	MPa	ISO 527-1/-2
Yield strain	4	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	40	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	20	kJ/m ²	ISO 179/1eA
Flexural modulus	2250	MPa	ISO 178
Flexural strength	80	MPa	ISO 178
Izod notched impact strength (-20°C)	55	kJ/m ²	ISO 180/4A
Izod notched impact strength (23°C)	65	kJ/m ²	ISO 180/4A
Izod notched impact strength (-40°C)	35	kJ/m ²	ISO 180/4A

THERMAL PROPERTIES

Temp. of deflection under load (1.80 MPa)	105	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	120	°C	ISO 306
Burning Behav. at 1.6 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
Oxygen index	22	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	675	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	1.5	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	675	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.5	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	700	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	1.5	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	700	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	3	mm	IEC 60695-2-12

ELECTRICAL PROPERTIES

Relative permittivity (1 MHz)	2.9	-	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Surface resistivity	>1E15	Ohm	IEC 60093

DSM Product

Unlimited. DSM



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Electric strength	35	kV/mm	IEC 60243-1
Comparative tracking index	275	-	IEC 60112
Comparative tracking index (PLC)	2	class	UL 746A

OTHER PROPERTIES

Water absorption	0.6	%	Sim. to ISO 62
Density	1130	kg/m ³	ISO 1183

RHEOLOGICAL CALCULATION PROPERTIES

Thermal conductivity of melt	0.23	W/(m K)	-
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