M - 013

TECHNICAL DATA SHEET

CTE Material name: LONBEL® PSU
POLYSULFONE

Options:

n.t.= Not tested

APPLICATIONS

Medical engineering, electrical and construction industry

CHARACTERISTICS

High rigidity at good dimensional stability
Very high continuous service temperature
Very good hydrolysis resistance

GENERAL PROPERTIES	Unit	Test method	Value
			Polysulfone
Density	g/cm³	DIN EN ISO 1183-1	1,24
Water absorption	%	DIN EN ISO 62	0,2
Flammability		UL 94	HB / V0
MECHANICAL PROPERTIES			
Yield stress	Mpa	DIN EN ISO 527	80
Elongation at break	%	DIN EN ISO 527	15
Tensile modulus of elasticity	Mpa	DIN EN ISO 527	2600
Notched impact strength	kJ/m²	DIN EN ISO 179	6
Shore hardness	scale D	DIN EN ISO 868	85
Rockwell hardness	scale R	DIN EN ISO 2039-2	n.t.
THERMAL PROPERTIES			
Thermal conductivity	W/(m*K)	DIN 52612-1	0,26
Thermal capacity	KJ/(kg*K)	DIN 52612	1,1
Coeefficient of linear thermal expansion	10^{-6}/K	DIN 53752	55
Service temperature long term	ºC	Average	-50 / 160
Service temperature short term max.	ºC	Average	180
Vicat softening temperature	ºC	DIN EN ISO 306, Vicat B	n.t.
Heat deflection temperature	ºC	DIN EN ISO 75, Verf. A, HDT	175
Crystalline grain melting range	ºC	ISO 11357-3	n.t.
ELECTRICAL PROPERTIES			
Volume resistivity	Ω	DIN EN 61340	n.t.
Surface resistivity	Ω	DIN EN 61340	n.t.
Volume resistivity	Ω * cm	IEC 60093	10^{15}
Surface resistivity	Ω	IEC 60093	10^{14}
Dielectric constant		IEC 60250	3,2
Dielectric dissipation factor (50 Hz)		IEC 60250	0,001
Comparative tracking index		IEC 60112	125
Dielectric strength	Kv/mm	IEC 60243	30

CTE CROISSET THERMOPLASTICS ENGINEERING, S.L.