

M - 007

TECHNICAL DATA SHEET		APPLICATIONS	CHARACTERISTICS		
CTE Material name: LONBEL® PEEK-3 POLY ETHER ETHER KETONE "3" Options: Natural or blue n.t.= Not tested		Food processing industry	Excelent sliding behaviour Excelent dimensional stability Suitable for contact with foodstuffs according to EC 1935/2004		
GENERAL PROPERTIES		Unit	Test method	Value	
				Natural	Blue
Density	g/cm ³	DIN EN ISO 1183-1		1,36	1,41
Water absorption	%	DIN EN ISO 62		0,2	0,2
Flammability		UL 94		VO / VO	VO / VO
MECHANICAL PROPERTIES					
Yield stress	Mpa	DIN EN ISO 527		87	85
Elongation at break	%	DIN EN ISO 527		3	3
Tensile modulus of elasticity	Mpa	DIN EN ISO 527		3700	3700
Notched impact strength	kJ/m ²	DIN EN ISO 179		3,5	2
Shore hardness	scale D	DIN EN ISO 868		85	86
Rockwell hardness	scale R	DIN EN ISO 2039-2		n.t.	n.t.
THERMAL PROPERTIES					
Thermal conductivity	W/(m*K)	DIN 52612-1		n.t.	n.t.
Thermal capacity	KJ/(kg*K)	DIN 52612		n.t.	n.t.
Coefficient of linear thermal expansion	10 ⁻⁶ /K	DIN 53752		55	55
Service temperature long term	°C	Average		-30 / 250	-30 / 250
Service temperature short term max.	°C	Average		310	310
Vicat softening temperature	°C	DIN EN ISO 306, Vicat B		n.t.	n.t.
Heat deflection temperature	°C	DIN EN ISO 75, Verf. A, HDT		150	150
Crystalline grain melting range	°C	ISO 11357-3		343	343
ELECTRICAL PROPERTIES					
Volume resistivity	Ω	DIN EN 61340		n.t.	n.t.
Surface resistivity	Ω	DIN EN 61340		n.t.	n.t.
Volume resistivity	Ω * cm	IEC 60093		n.t.	n.t.
Surface resistivity	Ω	IEC 60093		10 ¹⁶	10 ¹⁷
Dielectric constant		IEC 60250		n.t.	n.t.
Dielectric dissipation factor (50 Hz)		IEC 60250		n.t.	n.t.
Comparative tracking index		IEC 60112		n.t.	n.t.
Dielectric strength	Kv/mm	IEC 60243		20	20