

M - 011

<b>TECHNICAL DATA SHEET</b>		<b>APPLICATIONS</b>	<b>CHARACTERISTICS</b>		
<b>CTE Material name: LONBEL® PS Blend (PS/PE) POLYSTYRENE + POLYETHYLENE (PS+PE)</b>		<b>Food:</b> Industrial applications ,packaging, trays	Vacuun formable, high chemical resistance, Food compliant according 10/2011/EU Food compliant according 1935/2004/EC, FDA		
<b>Options:</b> Food, conductive and dissipative (C&D)		<b>C&amp;D:</b> Automotive and electronic industry, packaging	Vacuun formable Conductive and dissipative Protection of electronics from electrostatics		
n.t.= Not tested					
<b>GENERAL PROPERTIES</b>		<b>Unit</b>	<b>Test method</b>	<b>Value</b>	
				<b>Food</b>	<b>C&amp;D</b>
Density	g/cm <sup>3</sup>	DIN EN ISO 1183-1		1,03	1,08
Water absorption	%	DIN EN ISO 62		< 0,1	< 0,1
Flammability		UL 94		HB	HB
<b>MECHANICAL PROPERTIES</b>					
Yield stress	Mpa	DIN EN ISO 527		14	20
Elongation at break	%	DIN EN ISO 527		44	95
Tensile modulus of elasticity	Mpa	DIN EN ISO 527		960	1240
Notched impact strength	kJ/m <sup>2</sup>	DIN EN ISO 179		33	34
Shore hardness	scale D	DIN EN ISO 868		n.t.	65
Rockwell hardness	scale R	DIN EN ISO 2039-2		n.t.	n.t.
<b>THERMAL PROPERTIES</b>					
Thermal conductivity	W/(m*K)	DIN 52612-1		0,17	0,17
Thermal capacity	KJ/(kg*K)	DIN 52612		n.t.	n.t.
Coefficient of linear thermal expansion	10 <sup>-6</sup> /K	DIN 53752		80	80
Service temperature long term	°C	Average		85	80
Service temperature short term max.	°C	Average		100	95
Vicat softening temperature	°C	DIN EN ISO 306, Vicat B		99	97
<b>ELECTRICAL PROPERTIES</b>					
Volume resistivity	Ω	DIN EN 61340		>10 <sup>12</sup>	10 <sup>4</sup> - 10 <sup>7</sup>
Surface resistivity	Ω	DIN EN 61340		>10 <sup>12</sup>	10 <sup>4</sup> - 10 <sup>7</sup>
Volume resistivity	Ω * cm	IEC 60093		n.t.	n.t.
Surface resistivity	Ω	IEC 60093		n.t.	n.t.
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		n.t.	n.t.