

Technical Properties of:		senocryl® E (Acrylic PMMA Extruded)		
Edition / Date:		2 / 24-03-2015		
Characteristics	Unit	Test method	Value	
MECHANICAL PROPERTIES				
Tensile strength	23 °C	MPa	ISO 527	70
Ball Hardness		MPa	ISO 2039-1	235
Charpy impact strength		kJ/m ²	ISO 179	17
Charpy notched impact strength		kJ/m ²	ISO 179	2
Elongation at break	23 °C	%	ISO 527	4
Flexural Strength		MPa	ISO 178	115
Rockwell Hardness	23 °C	M-Skala	ISO 2039-2	92
Tensile	(Specimen Type 1-B) Test Speed	mm/min	-	20
Tensile E-Modulus		MPa	ISO 527	3 200
DIELECTRIC PROPERTIES				
Permittivity	of 1 MHz		DIN 53483	3.7
	of 1 MHz		IEC 60250	3.7
Dissipation Factor			DIN 53483	0.06
			IEC 60250	0.06
Dielectric Strength		KV/mm	DIN 53481	30
		KV/mm	IEC 60243	30
Resistivity		Ohm x cm	DIN 53482	10 ¹⁵
		Ohm x cm	IEC 60093	10 ¹⁵
Surface Resistivity		Ohm	DIN 53483	10 ¹⁴
		Ohm	IEC 60167	10 ¹⁴
Tracking	phase KC		DIN 53480	600
PHYSICAL PROPERTIES				
Density	23 °C	g/cm ³	ISO 1183-1	1.19
	23 °C	g/cm ³	DIN 53 479	1.19
BURNING BEHAVIOUR				
Flammability classification*			UL 94	HB
Fire Behavior			DIN 4102	B2
GENERAL				
Water Absorption	24h storing in water, 23 °C	mg/50 min ⁻¹	ISO 62	25
	96h storing in water, 23 °C	mg/50 min ⁻¹	ISO 62	65
	23 °C	%	DIN 53495	1.95
	23 °C, 50% humidity	%	DIN 53715	0.66
	23 °C, 50% humidity	%	ISO 1110	0.66
	23 °C	%	ISO 62	1.95
Transmittance of 3mm thickness		%	DIN 5036T3	92
THERMAL PROPERTIES				
Coefficient of thermal expansion		1/K10 ⁴ (-5)	DIN 53752	0.7
Continuous operating temperature	lower temperature limit	°C (°F)	-	-30 (-22)
	20.000h	°C	DIN 53446	70
Service temperature short time		°C	DIN 53446	90
Thermal Conductivity		W/(m*K)	DIN 52612	0.18
Vicat B/50	50N / 50K/h	°C	ISO 306	105
RESISTANCE				
Concentrated Acids			-	C
Concentrated Alkalis			-	C
Diluted Acids			-	B
Diluted Alkalis			-	B
UV stabilization			-	A