

Technical Data Sheet

PROPERTY	TEST METHOD	UNITS	CAST ACRYLIC
Density	Archimedes	gcm-3	1.7
Flexural modulus	ISO 178	GN m -2	12
Flexural Strength	ISO 178	MN m -2	130
Impact Strength (unnotched)	ISO 179	kJ m -2	5
Elongation at break	ASTM D 368	%	2
Tensile Strength	ASTM D 638	MN - 2	70
Rupture modulus	ASTM D 760	MN m -2	80 + - 15
Hardness (Barcol)	ASTM D 2583	Scale	74
Hardness (Rockwell)	ISO 2039/2	Rockwell M	100
Heat distortion at 1.82 MN m ²	ASTM D 648	.C	100
Linear Thermal Expansion	Standard	.C-1	Mean 4.05 x 10 -5 (23.C to 70 .C)
Thermal Conductivity		Cal cm/cm ² .C sec	8 x 10 -4
Flammability	BSD 476:part 7 NeN 3883	Class Class	2 2
Smoke generation			Very low
Heat Resistance (patterned surface)			Not marked by pot of oil at 180.C left for 30 minutes
Temperature test oil filled pot 180. C / 5 min 220. C / 5 min 240. C / 5 min Glowing cigarette			Very slightly mat Slightly mat Slightly mat Slight yellowing. Stain is removable with cleanser
Abrasion taber test (DIN 53799)			5.8 mg/100 r on average
Impact resistance (DIN 43453)			3.75 x 10 -3J mm -2 on average
Indentation hardness (DIN 51214)			275 N mm-2 on average
Erichson-Scratch Test			scratch depth : 0.8 um on average
Boiling water test (90.C / 12h)			E below 1.0 on average
Pot drop test # 2			no break untill 120 cm on average
Hot Cold cycle test # 3			more than 2000 cycles wihin 10 days without cracks, slight discoloration