

Mechanical Properties	Norm	Unit	Cast
Specific weight	DIN 53479	gr/cm ³	1,19
Impact strength (Charpy)	DIN 53453	kJ/m ²	15
Notched impact strength(Izod)	DIN 53453	kJ/m ²	1,6
Tensile strenght (Charpy)	D638	Mpa	
-40° C			110
20° C			80
70° C			40
Elongation at break	DIN 53455	%	5,5
Flexural strength (st. Test specimen 80x10x4 mm ³)	D790	Mpa	115
Compressive yield stress	-	MPa	110
Max safety stress (up to 40° C)	-	Mpa	5 ... 10
Modulus of elasticity (short-term value)	D790	MPa	3300
term value)			
Indentation hardness H _{961/30}	DIN 53456	MPa	175
Abrasion resistance in Taber abrader test (100 rev.; 5,4 N; CS-10F)	-	% Haze	20 ... 30
Coefficient of friction μ	-	-	
plastic/plastic			0,8
plastic/steel			0,5
stell/plastic			0,45
(dilatation spees of 5%/min; up to 2% dilatation; at 20°C) Poisson's ratio μ_b	-	-	0,37
Resistance to puck impact from thickness (FMPA Stuttgart – Germany)	similar to DIN 18032	-	12 mm
Sound velocity	-	m/s	2700 ... 2800
Weight sounded reduction index R _w at thickness	-	dB	
4 mm			26
6 mm			30
10 mm			32
Optical Properties			
Transmittance ¹ D65	DIN 5036	%	~ 92
UV transmission	-	-	yes
Reflection loss the visible range (each surface)	-	%	4
Adsorption in the visible range	-	%	<0,05
Refractive index n _D ²⁰	-	-	1,491
ELECTRICAL PROPERTIES			
Volume resistivity	DIN VDE 0303	ohm . cm	>1015
Dielectric strength			
(1 mm specimen thickness)	DIN VDE 0303	kV/mm	~ 30

Dielectric constant at 50 MHz at 0,1 MHz	DIN 53483	-	3.6 2.7
Dielectric loss factor at 50 MHz at 0,1 MHz	DIN 53483	-	0.06 0.02
THERMAL PROPERTIES			
Coefficient of linear thermal expansion	DIN 53752	mm/m ° C	0,7
Possible expansion to heat and moisture	-	mm/m	5
Thermal conductivity at 20°C	DIN 52612	W/(mK)	0,19
U-value for thickness:	DIN 4701	W/m2K	
1 mm.			5,8
3 mm			5,6
5 mm.			5,3
10 mm.			4,4
Specific Heat	-	J/gK	1,47
Forming temperature	-	°C	160 ...175
Max. surface temperature (IR radiator)	-	°C	200
Max. service temperature (without mech. stress)	-	°C	80
Ignition temperature	DIN 51794	°C	425
Fire rating (material thickness > 2 mm.)	DIN 4102	-	B2, normal flammable
Heat deflection temperature under load (HDT)	-	°C	
deflection 1,8 Mpa			105
deflection 0,45 Mpa			113
Behavior Towards Water			
Water absorption (24 h. 20° C) from dry state; specimen 60 x 60 x 2 mm3	DIN 53495	mg	41
Max weight gain during immersion	DIN 53495	%	2,1