

PRODUCTS			AKRYLON®	AKRYLON® SOFT TONE
GENERAL				
Density	ISO 1183	kg/m ³	1190	1190
Water absorption against dry state (24h/23°C – 50x50x4 mm ³)	ISO 62-1	%	0.2	0.2
Moulding shrinkage	ISO 294-4	%	0.5 – 0.8	0.5 – 0.8
Food contact – GHP	EU 10/2011	–	conform	–
Biocompatibility	ISO 10993-5	Classification	no cytotoxic	–
MECHANICAL				
Tensile modulus	ISO 527-2	MPa	3200	3100
Tensile strength	ISO 527-2	MPa	70	70
Elongation at break	ISO 527-2	%	4	4
Flexural modulus	ISO 178	MPa	3300	3000
Flexural strength	ISO 178	MPa	115	110
Impact strength Charpy, unnotched	ISO 179-1/1eU	kJ/m ²	17	15
Impact strength Charpy, notched	ISO 179-1/1eA	kJ/m ²	2	2
Ball indentation hardness	ISO 2039-1	MPa	235	–
OPTICAL				
Light transmission (3 mm)	ISO 13468-2	%	92	88
Refractive index n _D ²⁰	ISO 489	–	1.492	1.492
Total solar energy transmission, g value (3 mm)	EN 410	%	86	–
Gloss value	DIN 67530	%	> 100	< 35
THERMAL				
VICAT temperature (Method B 50)	ISO 306	°C	105	105
Coefficient of linear thermal expansion	ISO 11359-2	mm/m x °C	0.07	0.07
Service temperature continuous use	–	°C	70	70
Service temperature at short term use	–	°C	90	90
Degradation temperature	–	°C	> 280	> 280
Forming temperature – air pressure – vacuum	–	°C	140 – 160 160 – 190	140 – 160 160 – 190
Specific heat capacity	ISO 11357-4	J/gK	1.47	1.47
Thermal conductivity	ISO 22007-1	W/mK	0.18	0.19
Fire resistance	EN 13501-1	Classification	E no burning droplets	–
	UL94	Classification	HB	HB
ELECTRICAL				
Dielectric strength	IEC 60243-1	kV/mm	30	30
Electrical strength	IEC 60243-1	kV/mm	10	10
Volume resistivity	IEC 62631-3-1	Ω m	10 ¹³	10 ¹³
Surface resistivity	IEC 62631-3-2	Ω	10 ¹⁵	10 ¹⁵
Relative permittivity (1 MHz)	IEC 60250	–	2.7	2.7
Dielectric dissipation factor (1 MHz)	IEC 60250	–	0.02	0.02

Note: These technical data of our products are typical ones for AKRYLON®.
The actually measured values are subject to production variations.