

## BWF INFINITE<sup>®</sup> (flexible PMMA)

If not stated otherwise, the given values result from tests which were realised using standardised specimen at room temperature. The given figures are indications only and therefore not binding. Please note the properties can be significantly affected by the tooling, the processing conditions as well as by the tolerances which are given due to the material.

### Mechanical characteristics

	Unit	Standard	Shore 75	Shore 85
Hardness	Shore A	ISO 7619-1	75	85
Hardness	Shore D	ISO 7619-1	29	36
Tensile modulus at 100 % strain	MPa	ISO 37	5,3	9,1
Flexural modulus	MPa	ISO 178	80	100
Yield Stress	MPa	ISO 37	11	12
Strain at break	%	ISO 37	220	190
Charpy impact strength (23 °C)	kJ/m <sup>2</sup>	ISO 179/1eA	NB	NB

### Thermal characteristics

	Unit	Standard	Shore 75	Shore 85
Continuous operating temperature	°C		ca. 40 *	ca. 40 *
Coefficient of linear thermal expansion (20-50 °C)	10 <sup>-5</sup> /°C	ISO 11359-1/-2	7 **	7 **
Shrinkage behaviour	%		max. 0,5 ***	max. 0,5 ***
Burning behavior UL94	class	IEC 60695-11-10	(HB)	(HB)

### Physical characteristics

	Unit	Standard	Shore 75	Shore 85
Water absorption (Water, 23 °C, 24 h)	%	similar to ISO 62	0,5	0,5
Water absorption, equilibrium v. (23 °C, 50 % r. h)	%	similar to ISO 62	0,275	0,275
Density	g/m <sup>3</sup>	ISO 1183	1,10	1,10

### Optical characteristics

	Unit	Standard	Shore 75	Shore 85
Refractive index		ISO 489	1,48	1,48
Haze (3 mm)	%	ISO 14782	< 2	< 2
Luminous transmittance (3 mm)	%	ISO 13468-2	91	91

\* Temperatures depend on mechanical strain in the application. Tests are required in individual cases. Tests have to be performed under real installation situations.

\*\* In completely relaxed state. May be accelerated by heat ageing resp. temperature influence.

\*\*\* Depending on storage conditions (temperature and relative humidity).