

Mechanische Eigenschaften*)

Type	Biomer® P209	Biomer® P226	Biomer® P300**)	Biomer® P304**)
Modulus (MPa)(1mm/min)	840-1200	1140-1900	~1850	~1500
Tensile strength (MPa)(50 mm/min)	15-20	24-27	28	28
Elongation (%)(50 mm/min)	8-15	6-9	~11	8
Flexural strength (N/mm ²)	18	35		31
Deformation at bending break (%)	4,7	6,6		2,5
Flexural strength at 3,5% (N/mm ²)	16	29		
Impact strength 23°C (KJ/m) (ISO 179/1eU)	no break	no break		60
Impact strength -30°C KJ/m ² (ISO 179/1eU)	70	30		
Notched impact strength 23°C (ISO 179/1eA)	4,7	2,7		
Notched impact strength -30°C (ISO 179/1eA)	3,4	1,4		
MFR 180°C	10 (2,16 kg)	10 (5 kg)		
MVR 180°C	10 (2,16 kg)	9,5 (5 kg)		
Vicat temperature °C (ISO 306/A/120)	134;54 (B/50)	147		
HDT °C (ISO 75/A)	50	59		108
Density (g/cm ³)	1,20	1,25		
Moisture absorption (%)	0,75	0,4		
Hardness (Shore D)	57	67		
Shrinkage (%)	1,2-1,3	1,2-1,3		

*) means of tests done at least 4 weeks after preparing test specimens
 Werte Data for most parts from University of Applied Sciences Hannover

Comparison

Polymer	Tensile strength	Elongation	Modululus
Biomer®P226	24-27	6-9	1140-1900
PP	22	12-20	600-1200
Biomer®P209	15-20	600-1200	900-1200
PE-LD	15-20	600	150-450
PE-HD	25-32	600-900	700-1200

Mechanische Daten als PDF herunterladen