## **POLYelast**

## **TPE R44**



Features Impact modified

Feature	Value	Unit	Testmethod
PHYSICAL PROPERTIES			
Density	0,94	g/cm³	ISO 1183
MFI at 230°C/2,16kg	8	g/10min	ISO 1133
MECHANICAL PROPERTIES			
Elongation at break		%	ISO 527-2
Maximum tensile strength	15	MPa	ISO 527-2
Maximum flexural strength	22	MPa	ISO 178
Flexural modulus at +23°C	700	MPa	ISO 178
IMPACT PROPERTIES			
Notched Charpy at +23°C	28	kJ/m²	ISO 179
Unnotched Charpy at +23°C	NB	kJ/m²	ISO 179
THERMAL PROPERTIES			
Heat Distortion Temperature			
HDT 120°C/h at 455kPa (B)	87	°C	ISO 75/1
HDT 120°C/h at 1820kPa (A)		°C	ISO 75/1
Softening temperature			
Vicat 50°C/h at 9,81N (A)	135	°C	ISO 306
Vicat 50°C/h at 49,05N (B)		°C	ISO 306
HARDNESS			
Hardness Shore D (15 s)	53	Shore D	D2240
ADDITIONAL INFORMATION			
Mould shrinkage (with flow)	1,3-1,5	%	ISO 294-4
Mould shrinkage (across flow)	1,3-1,5	%	ISO 294-4
Filler content	5	±2%	ISO 3451
PROCESS INSTRUCTIONS			
Drying time	2-4	h	
Drying temperature	70-80	°C	
Melt temperature	205-250	°C	
Mould temperature	40-60	°C	
Peripherical screw speed	650-800	mm/s	
Back pressure	60-100	bar	

During production stops, emptying the cylinder is recommended. Leave the screw in its front most position. For polycarbonate it is also recommended to leave the cylinder temperature at 160- 180°C and that the heating on the feeding zone is on. When producing details in flame retardant material, corrosion protected steel is to recommend for the mould. For further information, see the material safety datasheet (MSDS).

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