POLYabs





Features UL listed

Feature	Value	Unit	Testmethod
PHYSICAL PROPERTIES			
Density	1,05	g/cm³	ISO 1183
MFI at 230°C/5 kg	16	g/10 min	ISO 1133
MECHANICAL PROPERTIES			
Flexural modulus at +23°C	2800	MPa	ISO 178
Maximum flexural strength	85	MPa	ISO 178
Maximum tensile strength		MPa	ISO 527-2
Elongation at break		%	ISO 527-2
Elongation at yield		%	ISO 527-2
IMPACT PROPERTIES			
Impact strength			
Notched Charpy at +23°C	8	kJ/m²	ISO 179
Notched Charpy at -20°C		kJ/m²	ISO 179
Unnotched Charpy at +23°C		kJ/m²	ISO 179
Unnotched Charpy at -20°C		kJ/m²	ISO 179
THERMAL PROPERTIES			
Heat Distortion Temperature			
HDT 120°C/h at 455kPa (B)		°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)		°C	ISO 306
Vicat 50°C/h at 49,05N (B)		°C	ISO 306
FLAMMABILITY PROPERTIES			
Flammability			
GWT at 2 mm	650	°C	IEC 695-2-1
UL94 at 1.6 mm	HB*		UL94
ADDITIONAL INFORMATION			
Filler content		±2%	ISO 3451
Mould shrinkage (with flow)	0,6-0,8	%	ISO 294-4
Mould shrinkage (across flow)	0,6-0,8	%	ISO 294-4
PROCESS INSTRUCTIONS			
Drying time	2-4	h	
Drying temperature	80	°C	
Maximal moisture content	<0.1	%	
Melt temperature	190-230	°C	
Mould temperature	60-80	°C	
Peripherical screw speed	450-650	mm/s	
Back pressure	60-100	bar	

^{*}UL file no. E122538

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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