

## POLYTEC 500 HMW REG

POLYTEC 500 REG is a recycled high density polyethylene pressed with high molecular weight obtained from the recuperation of the 100% residues of our manufacturing.

Beside our environmental responsibility, this product is an economical substitute for our POLYTEC 500 HMW ideal for applications with lower requirements.

PROPERTIES*	UNITS	TEST METHODS	VALUE
<b>Properties</b>			
Density	g/cm <sup>3</sup>	ASTM D5105	0.93 / 0.955
Physiologically acceptable	-	-	YES
Welding	-	-	YES
Hot Forming	-	-	YES
Water absorption at saturation in water of 23°C	%	-	0.01
<b>Mechanical properties</b>			
Yield stress	N/mm <sup>2</sup>	DIN ISO 527	26-28
Tensile strength at break	%	DIN ISO 527	300
Elongation at maximum stress	%	-	8
Elasticity Modulus	Mpa	DIN ISO 527	685 - 752
Charpy Impact	KJ/mm <sup>2</sup>	DIN ISO 179	Sin rotura
Notched impact strength	KJ/mm <sup>2</sup>	DIN ISO 179	50
Hardness Surface	KJ/mm <sup>2</sup>	DIN ISO 2039-1	45
Shore hardness D (15s)	-	ISO 868	66

Note: 1g/cm<sup>3</sup> = 1,000 kg/m<sup>3</sup>; 1Mpa= 1N/mm<sup>2</sup> ; 1kV/mm = 1MV/m

\* These data are very useful for the choice of material. The data listed here are indicative values and should not be used to establish specification limits of the material. From these values may not be deducted a legally binding of security of certain properties or the suitability for a particular application.

Dinamyc friction coefficient	-	-	0.15 / 0.25
<b>Thermal properties</b>			
Thermal conductivity at 23°C	W/(K.m)	-	0.38
Average coefficient of linear thermal expansion	K <sup>-1</sup>	DIN 53752	1.8·10 <sup>-4</sup>
Service temperature	°C	-	-100/+80
Flame resistance	-	DIN 4102 B2	Normal flamable
<b>Electrical properties</b>			
Electric strength	kV/mm	VDE 0303-21	46
Surface Resistance	'Ω	DIN IEC 167	10 <sup>14</sup>

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