PE HD 500 short mark. PE - HMW

properties: good mechanical properties, good sliding properties, good damping

behaviour, dimensionally stable, scratch-resistant and cut-resistant, lye and acid resistant, physiologically harmless, no water absorption

colour: natural

physical properties			
properties	test methods	units	results
molecular weight (average molecular weight)	-	g/mol	> 0,5*10 ⁶
density	ISO 1183	g/cm³	0,95
water absorption	ISO 62	%	< 0,01
flame classification	11194	_	HB

mechanical properties				
yield stress		ISO 527	N/mm²	26
elongation at yield		ISO 527	%	9
modulus of elasticity		ISO 527	MPa	1000
impact strength (Charpy)		ISO 179	kJ/m²	Without
	/ /			breakage
notched impact strength (Charp	y)	ISO 11542-2	kJ/m²	≥ 25
ball indentation hardness		ISO 2039-1	N/mm²	52
shore D hardness of 15-s value		ISO 868	-	60 - 65
dynamic coefficient of friction		-	-	0,2
wear (Sand-Slurry)		ISO 15527	%	350
.1 1				

thermal properties				
melting range DSC, 10K/min.	ISO 3	3146 °C	130 -	135
coefficient of thermal expansion between 23 ° C and 60 ° C	n ISO 1	11359 K ⁻¹	ca. 2 ⁻	*10 ⁻⁴
thermal conductivity	ISO 5	$\frac{W}{m*K}$	0,41	
usage temperature (max.)	-	°C	80	
usage temperature short term	-	°C	90	
usage temperature (min.)	\wedge	°C	- 100	

electrical properties			
surface resistivity	IEC 60093	Ohm	> 1012

Conformances according to:

EU-plastics directive 10/2011/EG FDA-directive 21CFR177.1520 FDA-directive 21CFR178.3297

September 2022

Notes for the user: The values given in this data sheet are based on a sheet with a 40mm thickness. Depending on the thickness the technical values may vary during processing.

The technical data given in this sheet correspond to our current state of knowledge and should not be construed as an agreement or guarantee regarding certain properties of our products. The decision on the suitability of a particular material for a specific application is up to the user. We reserve the right to modify the given data. Errors of the given data are reserved. The document was produced by machine and is valid without signature.