

Ottensteiner Kunststoff GmbH & Co. KG



OKULEN®

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plastics for industry

Characteristics and standard values	OK 1000 (PE-UHMW)					OK 1000 Reg.				
	natural	coloured	UV-black	antistatic (AST)	cond. black	Reg. coloured		Reg. black multi-col.	Reg. coarse multi-col.	
Mechanical Properties										
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Density ISO 1183-A	g/cm ³	0,93	0,93	0,94	0,95	0,98	0,94		0,94	0,94
Notched Impact strength (Charpy) ISO 11542-2	kJ/m ²	210	180 - 210	140 - 170	100 - 130	70 - 100	130-150		100-130	100-130
Abrasion - Internal method acc. to DIN 58836 (Slurry-Test rel. to GUR 4120 = 100 %)	%	100	100	100 - 110	110 - 120	110 - 120	120-140		120-140	120-140
Tensile strength at yield ISO/R 527 50 mm/min.	N/mm ²	20	15 - 20	15 - 20	15 - 20	15 - 20	15 - 20		15 - 20	15 - 20
Break elongation ISO/R 527 50 mm/min.	%	> 50	> 50	> 50	> 50	> 50	> 50		> 50	> 50
Creep properties under varying compressive stress Creep < 10 % in 7 days – (20°C)	N/mm ²	10	10	10	10	10	10		10	10
Dynamic value of friction PE-Metall P _m = 2 N/mm ² v = 10m/min	μ	0,2	0,2	0,2	0,2	0,2	0,2		0,2	0,2
Shore D, 3-s-value 6mm plate ISO 868		63	63	63	63	63	63		62-64	62-64
Waterabsorbtion	%	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1		< 0,1	< 0,1
Thermal Properties										
Melt temperature DSC ISO 3146	°C	133-135								
Permanente operation temperature, max.	°C	80								
Coefficient of linear expansion DIN 53752	23 - 80 °C	≈ 2*10 ⁻⁴ /K								
Electrical Properties										
Volume resistivity IEC 60093 / VDE 0303 Part 30	Ω*cm	>10¹⁴	<10 ¹⁴	≤10 ⁷	≤10 ⁶	≤10 ³	<10 ¹⁴		<10 ¹²	<10 ¹⁴
Surface resistivity IEC 60093 / VDE 0303 Part 30	Ω	>10¹³	<10 ¹³	≤10 ⁹	≤10 ⁷	≤10 ⁴	<10 ¹³		<10 ¹¹	<10 ¹³

The above data are based on the present knowledge and are given without guarantee. Black sheets may have antistatic properties.

Existing laws and conditions are to be respected by the user of our products.