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A Joint Venture of TSE Industries, Inc., Clearwater, Florida
 and Ottensteiner Kunststoff, GmbH & Co. KG, Germany

**plastics
for
industry**

Characteristics and standard values for OK 2000 (PE-UHMW) special types

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Material	DryRun	L	DG	SL	OF	W	SG	AB	H
color	black no. 912	brown no. 845	purple no. 562	brown no. 846	grey no. 702	grey no. 703	light grey no. 705	white no. 995	white no. 925
FDA-approved: 1 = yes, 2 = no	2	1	1	1	1	1	1	1	1

Mechanical Properties

Density ISO 1183-A / ASTM D-792	g/cm³	0,93	0,93	0,93	0,93	0,93	0,93	0,93	0,94	0,94
Abrasion - Internal method acc. to DIN 58836 (Slurry-Test rel. to GUR 4120 = 100 %)	%	75	65	70	75	65	70	70	80	80
Tensile strength ISO/R 527 / ASTM D-638	N/mm²	≥ 17	≥ 17	≥ 17	≥ 17	≥ 17	≥ 17	≥ 17	≥ 17	≥ 17
Break elongation ISO/R 527 / ASTM D-638	%	> 50	> 50	> 50	> 50	> 50	> 50	> 50	≥ 50	> 50
Creep properties under varying compressive stress	N/mm²	10	10	10	10	10	10	10	10	---
Coefficient of friction, ASTM 1894 metal=Rz 2,5μ, Pm = 2 N/mm ² , v = 150mm/min,	static μ	0,15	0,17	0,15	0,15	0,17	0,16	0,14	0,18	0,18
	dynamic μ	0,08	0,12	0,09	0,09	0,12	0,10	0,09	0,13	0,13
Shore D Hardness, ISO 868 / ASTM D-2240		62	62	62	62	62	62	62	62	62

Thermal Properties

Melt point DSC ISO 3146 / ASTM D-3417		135 - 137 °C / 275 – 278 °F								---
Permanente operation temperature, max.		80 °C / 176°F								150 / 300
Coefficient of linear expansion DIN 53752 / ASTM D-696		23 – 80°C ≈ 2*10 ⁻⁴ /K / 73-176°F ≈ 1,1 * 10 ⁻⁴ /F								

Electrical Properties

Volume resistivity IEC 93 / ASTM D-257	Ω*cm	<10 ⁹	<10 ¹⁴	<10 ¹⁴	<10 ¹⁴	<10 ¹⁴	<10 ¹⁴	<10 ¹⁴	<10 ¹⁴	<10 ¹⁴	>10 ¹⁴
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