

Black Reprocessed UHMW - Material Data Sheet

This grade of reprocessed UHMW contains multi-colored particles of finely reground UHMW-PE polymer.

<p>Properties:</p> <ul style="list-style-type: none"> • Good gliding properties • Economical and Effective • Seawater resistance • Environmentally responsible 	<p>Color:</p> <ul style="list-style-type: none"> • Black – multi-colored <p>Application fields:</p> <ul style="list-style-type: none"> • Fender Pads, Marine, Outrigger Pads
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Physical Properties	Method	SI Unit	SI Value
Density	ASTM D792 ISO 1183-1	g/cc g/cm ³	> 0.94 > 0.94
Abrasion (Sand-Slurry-Test rel. to GUR 4120 = 100%)	ISO 15527	% (Average)	130 - 150
Notched impact strength	ISO 11542-2	mJ/mm ² kJ/m ²	> 70
Tensile strength, yield	ASTM D638 ISO 527-2	psi MPa	> 2610 > 18
Break elongation	ASTM D638 ISO 527-2	% %	50 - 250 > 50
Creep properties under varying compressive stress : Creep <10%	max.	psi MPa	1450 10
Coefficient of friction, ASTM 1894 metal= Rz 2,5 μ, Pm= 2 N/mm ² , V= 150 mm/min	Static Dynamic	μ μ	~ 0.20 ~ 0.18
Shore-hardness, 3-s-value 6mm plate	ASTM D2240 ISO 868 / DIN 53505	D D	64 - 67 64 - 67
Water absorption	---	%	< 0.1 (Nil)
Flammability	UL 94	---	HB
Thermal Properties			
Melt temperature	ASTM 3417 (DSC) ISO 3146 (DSC)	°F °C	275 – 278 135 – 137
Permanent operation temp., max.	---	°F °C	176 80
Coefficient of linear expansion	ASTM D696 DIN 53752	73 – 176 °F 23 – 80°C	≈ 1.1x10 ⁻⁴ /°F ≈ 2.0x10 ⁻⁴ /°C
Electrical Properties			
Surface resistivity	ASTM D257 IEC 93	Ohm Ω	< 10 ¹⁴ < 10 ¹⁴
Volume resistivity	ASTM D257 IEC 93	Ohm Ω	< 10 ¹⁴ < 10 ¹⁴

The above data are based on the present knowledge and are given without guarantee.
Existing laws and conditions are to be respected by the user of our products.