

PRODUCT INFOSHEET: Duro-Glide® Enhanced UHMW #983 Black Glass Filled

Duro-Glide® #983 Black Glass Filled is enhanced with a glass filler that gives the UHMW a higher abrasion resistance than standard material. It offers excellent impact strength for tough applications. Our #983 formula is pigmented black for outdoor use, is UV-stabilized and is antistatic.

PROPERTIES

Extremely Wear Resistant | Good Sliding Properties | Good Chemical Resistance | Static Reduced/Antistatic | Low Maintenance | Longer Lifetime Over Standard UHMW

INDUSTRY / APPLICATIONS

Machine Construction | Conveyor Industry | Agriculture, Farming Equipment | Waste Water and Filtration Systems | Paper Industry (Wet End/Paper Mfg) | Chemical Industry

COLOR

#983 Black

CHARACTERISTICS AND STANDARD VALUES

Physical Properties	Method	SI Unit	SI Value
Density	ASTM D792	g/cc	> 0.95
	ISO 1183-A	g/cm ³	> 0.95
Abrasion (Sand-Slurry-Test rel. to GUR 4120 = 100%)	ISO 15527	% (Average)	65 - 75
Notched Impact Strength	ISO 11542-2	mJ/mm ²	> 120
		kJ/m ²	
Tensile Strength, Yield	ASTM D638	Psi	> 2610
	ISO 527-2	MPa	> 18
Break Elongation	ASTM D638	%	> 50
		ISO 527-2	%
Creep properties under varying compressive stress: Creep ~10%	Max.	Psi	3000 - 3100
		MPa	20,7 – 21,3
Coefficient of Friction, ASTM 1894 Metal= Rz 2,5 μ, Pm= 2 N/mm ² , V= 150 mm/min	Static	μ	0.14
	Dynamic	μ	0.09
Shore-hardness, 3-s-value 6mm plate	ASTM D2240	D	69 - 70
	ISO 868 / DIN 53505	D	69 - 70
Water Absorption	--	%	< 0.1 (Nil)
Flammability	UL 94	--	HB
Thermal Properties			
Melt Temperature	ASTM 3417 (DSC)	°F	275 – 278
	ISO 3146 (DSC)	°C	135 – 137
Permanent Operation Temp., Max.	--	°F	176
		°C	80
Coefficient of Linear Expansion	ASTM D696	73 – 176 °F	≈ 1.1x10 ⁻⁴ /°F
	DIN 53752	23 – 80°C	≈ 2.0x10 ⁻⁴ /°C
Electrical Properties			
Surface Resistivity	ASTM D257	Ohm	> 10 ⁹
	IEC 93	Ω	> 10 ⁹
Volume Resistivity	ASTM D257	Ohm * cm	> 10 ⁹
	IEC 93	Ω * cm	> 10 ⁹

Any suggestions or recommendations for the use of our products are based on tests believed to be reliable and on the independent judgment of our technicians. However, it is ultimately up to the Customer/End User to determine whether the product(s) provided by Duro-Glide® are suitable for the intended purpose or application. Duro-Glide® Polymer Sheets makes no warranty of fitness for a particular purpose, nor does it guarantee the results to be obtained. Nothing in this literature is intended as a recommendation to use our products so as to infringe on any patent.