

PRODUCT INFOSHEET: Duro-Glide® Enhanced UHMW #931 Black Antistatic

Duro-Glide® #931 Black Antistatic is a permanent antistatic / static-reduced UHMW polymer. This material is used for applications where static electricity build up is not desired. The additive type and quantity used meets the cleanliness class FDA 178.3297 for food industry applications.

PROPERTIES

Antistatic / Static Reduced Properties | Noise Level Reduction | Excellent Wear Resistance | FDA Complaint (21 CFR 178.3297)

INDUSTRY / APPLICATIONS

Conveyor Industry | Mining Industry | Machine Construction | Electronic Equipment | Pump Industry

COLOR

#931 Black

CHARACTERISTICS AND STANDARD VALUES

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)	100 (± 10%)
Notched Impact Strength	ISO 11542-2	mJ/mm ² kJ/m ²	> 100
Tensile Strength, Yield	ASTM D638 ISO 527-2	Psi MPa	> 2610 > 18
Break Elongation	ASTM D638 ISO 527-2	% %	> 200 > 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	0.17 0.12
Shore-hardness, 3-s-value 6mm plate	ASTM D2240 ISO 868 / DIN 53505	D D	63 63
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 ⁹ < 10 ⁹
Volume Resistivity	ASTM D257 IEC 93	Ohm Ω	< 10 ⁶ < 10 ⁶

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.