

PRODUCT INFOSHEET: Duro-Glide® Virgin UHMW Natural

Duro-Glide® Virgin Natural is an Ultra High Molecular Weight (UHMW) polymer which has a high molecular and meets the FDA requirements for food industry applications.

FDA STATUS

Complies with the FDA requirements of 21 CFR 177.1520 and 21 CFR 178.2010 with respect to the type of components as well as the relative concentration of each component in the composition.

PROPERTIES

Good sliding properties | Low coefficient of friction | Good notched impact strength

INDUSTRY / APPLICATIONS

Conveyor Industry | Machine Construction | Food Industry

COLORS

Natural (white)

CHARACTERISTICS AND STANDARD VALUES

Physical Properties	Method	SI Unit	SI Value
Density	ASTM D792	g/cc	0.93
Abrasion (Sand-Slurry-Test rel. to GUR 4120 = 100%)	ISO 15527	% (Average)	100
Notched Impact Strength	ISO 11542-2	mJ/mm ²	> 170
Tensile Strength, Yield	ISO 527-2	Psi	2650
Break Elongation	ASTM D638	%	270
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	D	63
Water Absorption	--	%	0.1
Flammability	UL 94	--	HB
Thermal Properties			
Melt Temperature	ASTM 3417 (DSC)	°F	275 – 278
Operation Temp., Max.	--	°F	176
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

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.