

ASC-UV

GlideShield ASC-UV 是一种防静电/导电、紫外线稳定的超高分子量聚乙烯 (UHMW-PE) 共混材料。

GlideShield ASC-UV 拥有业内最高的导电性（表面电阻率为 $10^2 - 10^3$ ），可防止粉末输送和集尘过程中产生的静电积聚，并为电子设备、家电、邮件分拣设备、复印机、打印机和计算机提供静电放电保护。

GlideShield ASC-UV 专为满足户外严苛环境而设计，拥有业内最高的紫外线稳定性，户外使用寿命比标准 UHMW 产品长 10 倍。

GlideShield ASC-UV 提供耐磨条或背胶两种选择。我们提供多种粘合剂，几乎可以满足任何应用需求。



AVAILABLE THICKNESS

.031" (.78 mm), .040" (1.02 mm), .062" (1.57 mm), .080" (2 mm), .093" (2.36 mm), .125" (3.17 mm)

AVAILABLE WIDTHS

All dimensions between 1/4" (6.35 mm) and 24" (610 mm)

UHMW PROPERTIES

- 卓越的耐磨性
- 极高的抗冲击强度
- 不吸湿
- 自润滑 – 无需油或润滑剂
- 卓越的降噪性能
- 耐化学性和耐腐蚀性
- 在 -30°C 下仍能保持性能和特性
- 符合 ASTM-D-4020 标准
- 符合 UL 94 HB 可燃性等级

MECHANICAL PROPERTIES	ASTM Test	Units Metric (U.S.)	UHMW Thickness Gauges		
			.031"	.062"	.125"
Density	D792	gm/cc	0.93	0.93	0.93
Tensile Strength @ Yield	D638	MPa(psi)	23(3300)	20(2964)	22(3227)
Tensile Strength @ Break	D638	MPa(psi)	53(7740)	49(7056)	44(6373)
Elongation @ Break	D638	%	60	463	466
Youngs "E" Modulus	D638	MPa(psi x 105)	725(1.05)	731(1.06)	672(.097)
Izod Impact Strength	D256 ⁽¹⁾	J/m(ft-lb/in notch)	*	*	80(16.8)
Hardness Shore "D"	D2240	-	65	65	65
Water Absorbtion	D570	%	Nil	Nil	Nil
Rel. Solution Viscosity	D4020	dl/gm	2.3-3.5	2.3-3.5	2.3-3.5
Coefficient of Friction	D1894-96	Static	.16	.16	.16
Coefficient of Friction	D1894-96	Dynamic	.14	.13	.14

(1) Izod Impact: Samples have 2(15° +/- 1/2°) notches on opposite sides to a depth of 5mm

THERMAL PROPERTIES	ASTM Test	Units Metric (U.S.)	UHMW Thickness Gauges		
			.031"	.062"	.125"
Crystalline Melting Range	Polarizing	°C(°F)	136(276)	134(273)	134(273)
Crystallinity	D3417-96	%	48	47	50
Coefficient of Linear Expansion					
20° to 100° C	D696	K ⁻¹	*	*	1.5 x 10 ⁻⁴
-20° to -100° C	D696	K ⁻¹	*	*	9.18 x 10 ⁻⁵

ELECTRICAL PROPERTIES (For Conductive Black Only)	ASTM Test	Units Metric (U.S.)	UHMW Thickness Gauges		
			.031"	.062"	.125"
Volume Resistivity	D257	Ohms/cm	5.9544x10 ⁷	1.4516x10 ⁷	>2x10 ⁷
Dielectric Strength	D150	Kv/cm(V/mil)	*	*	142
Dielectric Constant	D150		2.481	2.454	2.542
Surface Resistivity	D257	Ohms	10 ³	10 ³	10 ³
Static Decay		Seconds	<.01	<.01	<.01
Dissipation Factor					
At 50Hz	D150		0.0594	0.0213	0.0082
At 10KHz	D150		0.1085	0.0690	0.0022
At 5MHz	D150		0.1035	0.2340	0.0034

Comparison of Dynamic Coefficient of Friction on Polished Steel						
Material	UHMW-PE	Nylon 6	Nylon 6/6	Nylon MoS2	PTFE	Acetal Polymer
Dry	.10 – .22	.15 – .40	.15 – .40	.12 – .20	.04 – .25	.15 – .35
Water	.05 – .10	.14 – .19	.14 – .19	.10 – .12	.04 – .08	.04 – .20
Oil	.05 – .08	.02 – .11	.02 – .11	.08 – .10	.04 – .05	.05 – .08

* No reading could be taken due to material thickness