

DuraSurf™ BSR



PROFESSIONAL PLASTICS

Crown Plastics **DuraSurf™ BSR** tapes are specifically designed to meet the demands of the automotive industry to help eliminate Buzz, Squeak and Rattle issues in auto interiors. **DuraSurf™ BSR** tapes eliminate wear and noise between dissimilar materials, reduce warranty issues, allow movement between adjoining parts, protect painted surfaces, reduce marring and extend vehicle life. **DuraSurf™ BSR** tapes are easily die-cut to fit within existing designs.

DuraSurf™ BSR tapes are tested to major automotive specifications, including GM9985804, GM6419, Ford ESB-M3G123-B, Chrysler MS-CH612 and GMW 16879.



AVAILABLE THICKNESS

.003" (.076 mm), .005" (.127 mm), .010" (.25 mm), .015" (.38 mm), .020" (.5 mm)

AVAILABLE WIDTHS

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

UHMW PROPERTIES

- Bonded with acrylic adhesive
- Excellent abrasion and wear resistance
- Very high impact strength
- Available in Natural and Black
- C05 and C10 available in Black
- Natural color meets FDA and USDA guidelines
- No moisture absorption
- Self-lubricating – no need for oils or lubricants
- Excellent noise abatement properties
- Chemical resistance and corrosion resistant
- Maintains performance and properties at -30°C
- Meets ASTM-D-4020
- Low coefficient of friction
- Conforms to flammability rating UL 94 HB

DuraSurf™ BSR

MECHANICAL PROPERTIES	Test Method	Units Metric(u.S.)	UHMW Thickness Gauges		
			.005"	.010"	.020"
Density	ASTM-D 792	gm/cc	0.93	0.93	0.93
Tensile Strength @ Yield	ASTM-D 638	MPa/psi	22.5	22.1	20.9
Tensile Strength @ Break	ASTM-D 638	MPa/psi	62.2	64.9	56.7
Elongation @ Break	ASTM-D 638	%	356	350	360
Youngs "E" Modulus	ASTM-D 638	MPa/psi	642	564	570
Izod Impact Strength	ASTM-D 256	J/m (ft-lb/in notch)	N/A	N/A	N/A
Hardness Shore "D"	ASTM-D 2240		55	58	63
Water Absorption	ASTM-D 570	%	0.04	0.01	0.02
Rel. Solution Viscosity	ASTM-D 4020	dl/gm	2.3 - 3.5	2.3 -3.5	2.3 -3.5
Coefficient of Friction	ASTM-D 1894	Static	0.4	0.47	0.4
Coefficient of Friction	ASTM-D 1894	Dynamic	0.39	0.41	0.38
Coefficient of Linear Thermal Expansion	ASTM-D 831	°C	N/A	N/A	N/A

UHMW 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

UHMW 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



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