



# MGX - 1562

.010 MIL VELVET/MATTE  
POLYCARBONATE

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- Durable, chemical-resistant, high-performance polycarbonate
- End-uses include: button panels, nameplates, keypads, & machine panels
- Scratch-resistant velvet surface
- Impact-resistant film protects the ink

	PROPERTIES	TEST METHODS	UNITS	TYPICAL VALUES
<b>Physical</b>	Specific Gravity	D-792	----	1.20
	Area Factor	D-570	ft <sup>2</sup> /lb/mil	160
	Water Absorption	D-570	%	0.32 equilibrium
	Rockwell Hardness	D-785	(R Scale)	118
	Pencil Hardness	D-3363	Scratch Hardness	B
<b>Optical</b>	Light Transmission	D-1003	%	88-91
	Haze	D-1003	%	0.5(CG only)
	Yellowness Index	D-1925	----	<1.0
	Refractive Index	D-542	ND	1.586
	Taber Abrasion Resistance Δ Haze	D-1044	%	45
<b>Mechanical</b>	Tensile Strength Yield	D-882	psi	8,700
	Tensile Strength Break	D-882	psi	10,500
	Elongation	D-882	%	150
	Tensile Modulus	D-882	psi	350,000
	Tear Strength Initial	D-1004	lb/mil	1.4 - 1.8
	Tear Strength Propagation	D-1922	g/mil	30 - 55
	Impact Strength	Gardener	in-lb	120 - 30 mil film
	Burst Strength	D-774	Mullen, psi	40 - 45 @ 1 mil
	Fold Endurance	M.I.T.	Double Folds	200 @ 10 mil
<b>Thermal</b>	Tensile Heat Distortion	D-1637	°F	302° @ 50 psi
	Deflection Temperature	D-648	°F	288° @ 264 psi
	Specific Heat	C-351	Btu/lb/°F	0.30
	Thermal Conductivity	C-177	Btu/hr/ft <sup>2</sup> /°F/in	1.35
	Coefficient of Thermal Expansion	D-696	in/in/°F	38 x 10 <sup>-6</sup>
	Strain Relief	D-1204	%	<0.2 275°F
	Brittleness Temperature	D-746	°F	-211
	Vicat Softening Temperature	D-1525	°F	305
<b>Electrical</b>	Dielectric Strength 72°F in oil	D-149 short time	V/mil	1,700 10 mil film
	Dielectric Constant 60 Hz/10°Hz	D-150	----	3.00 / 3.00
	Dissipation Factor 60 Hz/1MHz	D-150	----	.001 / .002
	Volume Resistivity	D-257	ohm-cm	10 <sup>17</sup>
	Surface Resistivity	D-257	ohm-sq	10 <sup>15</sup>
<b>Flammability</b>	UL Flammability	UL94	----	VTM-2 .005 and .010

### Product Performance and Suitability Disclaimer

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