

## Data sheet – Acrylic mirror sheet

Property	Test Method	Units	Value
<b>Physical</b>			
Specific gravity	D-792		1.19
Sound transmission	E 90 E 413	db	27
Water absorption	D-570	% By weight	0.40
Shrinkage	D-702	% Shrinkage	< 5%
Relative density*	In-house	g/cm <sup>3</sup>	0.65 - 0.70
<b>Mechanical</b>			
Tensile strength – Max	D-638	psi	11,030
Tensile elongation – Max	D-638	%	5.8
Tensile modulus of elasticity	D-638	psi	490,000
Flexural strength – Max	D-790	psi	17,000
Flexural modulus of elasticity	D-790	psi	490,000
Izod impact strength – molded notch	D-256	Ft-lb/in Notch	0.4
Izod impact strength – milled notch	D-256	Ft-lb/in Notch	0.28
Tensile impact strength	D-1822	Ft-lb/in <sup>2</sup>	20
Abrasion resistance	D-1044		
Change in haze	D-1044		
0 cycles	D-1044	Haze %	0
10 cycles	D-1044	Haze %	11.2
50 cycles	D-1044	Haze %	24.0
200 cycles	D-1044	Haze %	24.9
Rockwell hardness	D-785		M-95
<b>Thermal</b>			
Service temperature		°F	170-190
Softening temperature		°F	210-220
Melting temperature		°F	300-315
Deflection temperature	D-648		
264 psi		°F	203
66 psi		°F	207
Coefficient of thermal expansion -30 to 30°C	D-696	In/(in-°F)x10 <sup>-5</sup>	6.70
Thermal conductivity	C-177	BTU-ft/(hr-ft <sup>2</sup> -°F)	0.075
Flammability (Burning rate)	D-635	In/minute	1.019
<b>Chemical</b>			
Resistance to stress – critical crazing stress to:	ARTC Modification of MIL-P-6997		
Isopropyl alcohol		psi	900
Lacquer thinner		psi	500
Toluene		psi	1,300
Solvesso 100		psi	1,600

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.

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