

OPTIX DA Product Details



Discover an acrylic sheet that doesn't require an adhesion promoter prior to ink application.

Often, printers sacrifice the outstanding clarity of acrylic sheet, for the good UV ink adhesion properties offered by other plastic sheet substrates.

Not anymore! With Optix® DA, the time-consuming task of applying an adhesion promoter isn't necessary. You can produce high-quality, vibrantly colored prints utilizing UV digital flatbed technology, without this costly pre-press treatment - saving you time and money!

Optix® DA (Digital Acrylic Sheet)

- Designed as the perfect acrylic sheet for flatbed digital printers that use UV curable ink technology.
- Produced with a specially formulated acrylic polymer that promotes optimal adhesion of UV curing inks without the need for an adhesion promoter prior to ink application.

Developed and tested with leading manufacturers of digital UV flatbed printers and various ink suppliers.



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Physical Properties	ASTM Test Method	Units	Values
Specific Gravity	D-792		1.19
Optical Refractive Index	D-542		1.49
Light Transmittance Total Haze	D-1003	% %	92 2
Sound Transmission	E 90 E 413	db	27
Water Absorption	D-570	% By Weight	0.40
Shrinkage	D-702	% Shrinkage	<5%

Mechanical			
Tensile Strength - Max. Tensile Elongation - Max. Tensile Modulus of Elasticity	D-638	psi % psi	11,030 5.8 490,000
Flexural Strength - Max. Flexural Modulus of Elasticity	D-790	psi psi	17,000 490,000
Izod Impact Strength - Molded Notch	D-256	ft-lb/in Notch	0.4
Izod Impact Strength - Milled Notch		ft-lb/in Notch	0.28
Tensile Impact Strength	D-1822	ft-lb/in ²	20
Abrasion Resistance Change in Haze	D-1044		
0 cycles		Haze, %	0
10 cycles		Haze, %	11.2
50 cycles		Haze, %	24.0
200 cycles		Haze, %	24.9
Rockwell Hardness	D-785		M-95

Thermal	ASTM Test Method	Units	Values
Maximum Recommended Continuous Service Temperature		°F	170-190
Softening Temperature		°F	210-220
Melting Temperature		°F	300-315
Deflection Temperature 264 psi 66 psi	D-648	°F °F	203 207
Coefficient of Thermal Expansion -30 to 30°C	D-696	in/(in-°F) x 10 ⁻⁵	3.0
Thermal Conductivity	C-177	BTU-ft/ (hr-ft ² -°F)	0.075
Flammability (Burning Rate)	D-635	in/minute	1.019
Smoke Density Rating	D-2843	%	3.4
Self-Ignition Temperature	D-1929	°F	833
Flame Spread Index	E-84		115
Smoke Developed Index			550

Chemical			
Resistance to Stress - Critical Craze 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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