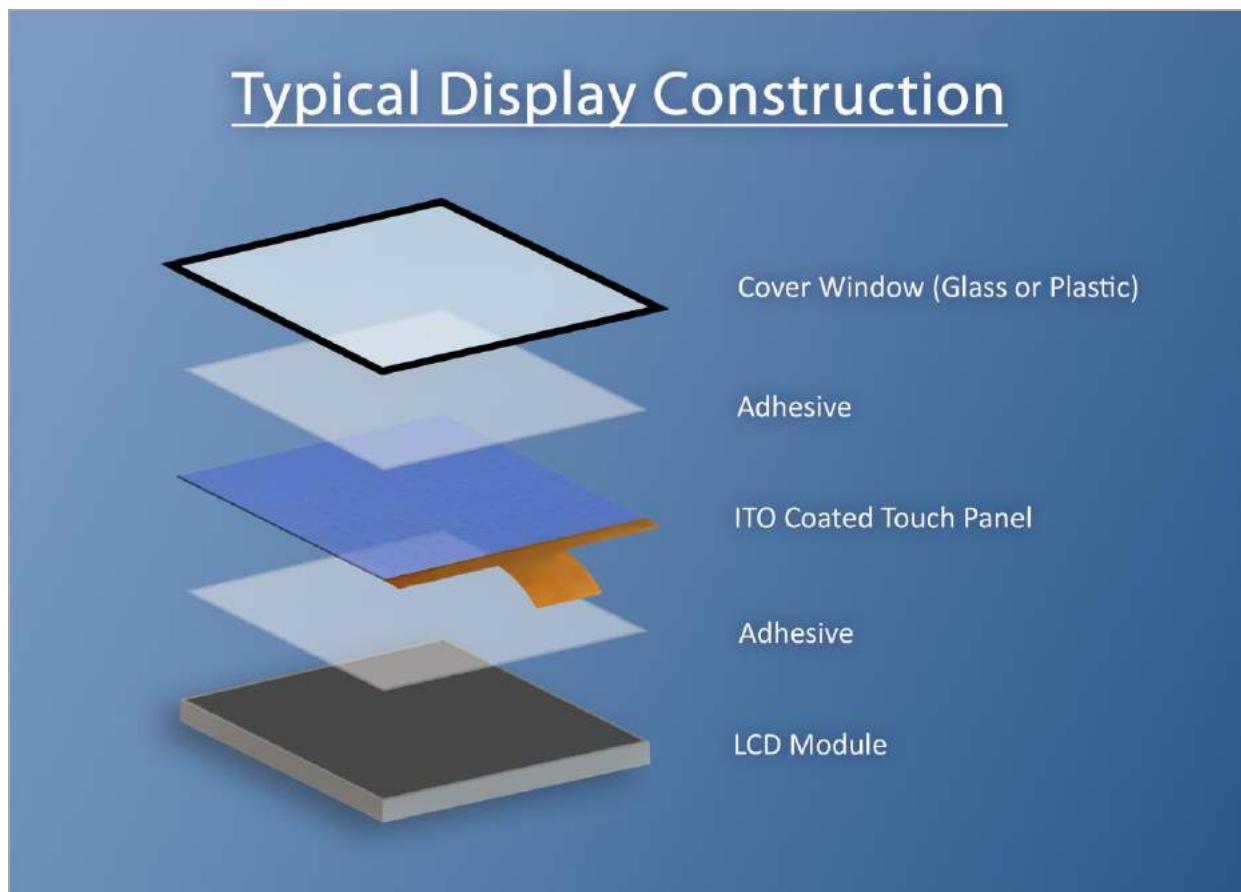


Dymax 9700-Series Display Lamination Adhesives

Dymax display lamination adhesives are specifically formulated for LCD display and touch panel applications where crystal-clear, invisible bonds are required. The adhesives bond glass to glass, glass to plastic, and plastic to plastic upon exposure to ultraviolet light, in seconds. Dymax display lamination adhesives are designed to maximize light transmission, accurate color, brightness, and clarity of LCDs. Common applications include monitors, tablets, LCD screens, kiosk panels, and mobile phones.

Dymax display lamination adhesives offer:

- Non-yellowing/optical clarity
- Excellent bond strength
- Low shrinkage
- Excellent re-workability
- Low system costs



Technical Data – 9701, 9702, & 9703

	Product	9701	9702	9703	Test Method
		Property	Property	Property	
Uncured Properties	Solvent Content	No Nonreactive Solvents	No Nonreactive Solvents	No Nonreactive Solvents	N/A
	Chemical Class	Acrylated Urethane	Acrylated Urethane	Acrylated Urethane	N/A
	Appearance	Light Yellow Liquid	Light Yellow Liquid	Light Yellow Liquid	N/A
	Soluble in	Organic Solvents	Organic Solvents	Organic Solvents	N/A
	Density, g/ml	0.93	0.93	0.93	ASTM D1875
	Viscosity, cP (20 rpm)	200 (nominal)	950 (nominal)	30,000 (nominal)	DSTM 502 [†]
Physical Properties (Cured)	Durometer Hardness	00-70	00-70	00-80	ASTM D2240
	Tensile at Break, MPa [psi]	0.49 [71]	0.89 [129]	1.85 [268]	ASTM D638
	Elongation at Break, %	74	137	157	ASTM D638
	Modulus of Elasticity, MPa [psi]	0.54 [79]	0.36 [52]	0.73 [106]	ASTM D638
	Glass Transition T _g , °C	-15	1	-4	DSTM 256 [†]
	CTE _{a1} , mm/m/°C	76	105	74	DSTM 610 [†]
	CTE _{a2} , mm/m/°C	273	355	229	DSTM 610 [†]
	Boiling Water Absorption, % (2 h)	0.5	0.35	0.38	ASTM D570
	Water Absorption, % (25°C, 24 h)	0.4	0.42	0.26	ASTM D570
	Volumetric Shrinkage, %	4.9	4.2	4.2	DSTM 611 [†]
Optical Properties	Refractive Index (20°C) uncured	1.50	1.49	1.48	ASTM D542
	% Transmittance at 570 nm	99	100	97	DSTM 501 [†]
	Yellowness (b*) initial (5 mil thick)	0.08	0.12	0.47*	DSTM 612 [†]
	Yellowness (b*) after 85°C/85% RH, 500 h (5 mil thick)	0.14	0.10	0.95*	DSTM 612 [†]
	Yellowness (b*) after 5 min exposure to 60 mW/cm ² UV (5 mil thick)	0.32	0.17	0.47*	DSTM 612 [†]
Electrical Properties	Dielectric Constant (1 MHz)	3.73	3.44	3.55	ASTM D150
	Dissipation Factor (1 MHz)	0.06	0.04	0.03	ASTM D150
	Dielectric Breakdown Voltage, kV/mm [V/mil]	24.14 [612.70]	20.86 [529.48]	24.88 [631.48]	ASTM D149
	Volume Resistivity, ohm-cm	6.54 x 10 ¹³	9.53 x 10 ¹⁴	7.51 x 10 ¹⁴	ASTM D257
	Surface Resistivity, ohm	7.44 x 10 ¹³	2.24 x 10 ¹⁴	1.76 x 10 ¹⁴	ASTM D257
Adhesion	Glass	●	●	●	
	PET	●	●	●	
	PC		●	●	
	PMMA		●	●	
	SS		●	●	
	Glass/Glass Compression Shear Strength (MPa)	1.4	3.4	3	DSTM 250 [†]

[†]Dymax Standard Test Method

* 20 mil Thick Film



In addition to our adhesives and coatings, Dymax also offers a variety of high-performance oligomers as well as dispensing and light-curing equipment. Our products are perfectly matched to work seamlessly with each other, providing design engineers with tools to dramatically improve manufacturing efficiency and reduce costs. Dymax is committed to providing the best chemistry, curing equipment, and dispensing systems that offer customers complete manufacturing solutions for their challenging applications.



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