



UV Display Bonding Adhesives

Fast, Clear, Bubble-Free, Optically Clear Bonds

- One component, no mixing required
- Fast cure with excellent bond strength to a variety of substrates
- Easy flow characteristics for flat panel lamination
- Low shrinkage minimizes visible distortion after cure
- Excellent re-workability
- High optical clarity
- Flexible with low stress and low modulus
- Very low yellowing for increased light transmission, enhanced brightness, optical clarity, and better contrast ratios transmission
- Enhanced thermal cycling
- Great for enhancing LCD and plasma screens, monitors, outdoor kiosks, navigation systems, mobile phones, and more.

Dymax display bonding adhesives are specifically formulated for applications where crystal-clear, invisible bonds are required. The adhesives bond glass to glass, glass to plastic, and plastic to plastic in seconds upon exposure to UV light. Dymax display bonding adhesives are designed to maximize light transmission, accurate color, brightness, and clarity of liquid crystal displays (LCDs). Reduced air entrapment creates strong, ripple-free bonds that help increase panel strength. These adhesives are commonly used to laminate LCDs, cover glass, and touch screens used for monitors, kiosk panels, and mobile phones.

The “on-demand cure” of these adhesives allows substrates to be repositioned precisely until parts are ready to be cured. Using a thin layer of Dymax adhesive controls cost and can reduce the weight of the final product. The adhesive also acts as a barrier against stress, significantly improving product reliability and warranty costs. Dymax display adhesives come in a variety of viscosities for ease of use and controlled dispensing and are available in a wide range of packaging sizes.



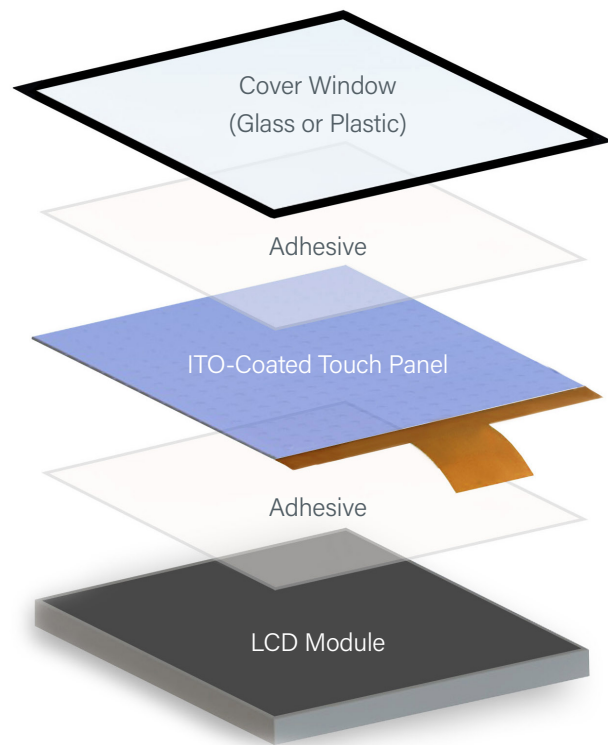
Optical bonding increases clarity, viewing angle, and vibration resistance

Product	Description	Viscosity, cP	Refractive Index	Yellowness b* initial, 5 mil thick	Durometer Hardness	Volumetric Shrinkage	Transmittance at 570 nm
9701	Low viscosity; low shrinkage; excellent re-workability; non-yellowing; good thermal shock resistance; bonds to various substrates	200	1.50	0.08	00-70	4.9%	99%
9702	Low shrinkage; excellent re-workability; non-yellowing; good thermal shock resistance; bonds to various substrates	950	1.49	0.12	00-70	4.2%	100%
9703	Gel viscosity; low shrinkage; excellent re-workability; non-yellowing; good thermal shock resistance; bonds to various substrates	30,000	1.48	0.47*	00-80	4.2%	97%

* 20 mil thick film

Commonly Bonded Substrates

Glass
Adhesive
Glass
Glass
Adhesive
PMMA
Polycarbonate
Adhesive
Glass
PET
Adhesive
Glass
PET
Adhesive
ITO Glass
Glass
Adhesive
Stainless Steel



Typical Display Construction

Common Applications of Dymax LCD Laminating and Bonding Adhesives

Dymax adhesives can be used in lamination applications to prevent screen glare.



Interactive Touch Kiosks

Adhesive bonds remain pliable without affecting performance.



Airport, Bus Station, and Train Station Information Monitors

Various unlike substrates can be laminated with a single adhesive. Not affected by temperature variations.



LCD Portable Games

Economical-to-use adhesive solutions keep product costs down.



Smart Connected Devices

Adhesives maximize light transmission, accurate color, brightness, and clarity of the LCD.

Outdoor Kiosks

Resists yellowing and harsh environments.



Our Commitment to Greener, Safer Manufacturing

Dymax is committed to green manufacturing that reduces environmental impact, conserves energy, and provides greater worker safety. Over the last 40 years, our light-curable materials and curing equipment have become the industry standard for fast, environmentally conscious assembly. Dymax products are readily replacing technologies that contain hazardous ingredients, produce waste, or require higher amounts of energy to process.



Eco-friendly, one-component materials



Materials with no added solvents for improved worker and user safety



Fast curing products and equipment designed for less energy consumption



Dymax meets global statutory and regulatory requirements

Dispensing & Light-Curing Systems for Display Bonding

A range of dispensing and curing options are available from Dymax including handheld and mountable dispensing valves, conveyorized curing systems, flood lamp systems, and spot-curing lamps.

Conveyors

Dymax UVC conveyor systems come in a range of curing widths to accommodate LCD screens from 3" up to 42". Customized conveyors are also available. Contact Dymax for more information and free consultation.

Flood Lamps

Dymax flood lamp systems are available for incorporating into existing assembly lines or for mounting over Dymax UVC conveyor systems. Contact Dymax for more information and free consultation.

Spot Lamps

Dymax spot-curing systems are used to cure beads sealing the gaps between the LCD to bezel.

Dispensing Systems

Dymax has developed high-quality, field-proven dispense systems to fit many types of adhesive and fluid dispensing applications. These systems include various automated and manual dispensing valves, spray valves and guns, controllers, material reservoirs, and related components for seamless integration into assembly processes. The systems provide accurate, consistent dispense for a range of low- to high-viscosity fluids. Dispensing systems with adjustable suck-back control and dispensing valves that offer contaminate-free dispensing are available.



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