

3M™ Optically Clear Adhesive 8261 • 8262 • 8263 • 8264 • 8265

Product Description

3M™ Optically Clear Adhesive 826X:

3M™ Optically Clear Adhesive 8261, 8262, 8263, 8264 and 8265 are bare ITO compatible and outgassing resistant. It is commonly used in touch screen displays and other applications requiring an optically clear bond.

Product Construction

Product Number	3M™ Optically Clear Adhesive				
	8261	8262	8263	8264	8265
Adhesive Type:	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic
Adhesive Carrier:	None	None	None	None	None
Approximate Thickness:					
Release Liner	3.0 mil (75 micron) Clear Polyester	3.0 mil (75 micron) Clear Polyester	3.0 mil (75 micron) Clear Polyester	3.0 mil (75 micron) Clear Polyester	3.0 mil (75 micron) Clear Polyester
Adhesive	1.0 mil (25 micron)	2.0 mil (50 micron)	3.0 mil (75 micron)	4.0 mil (100 micron)	5.0 mil (125 micron)
Release Liner	3.0 mil (75 micron) Clear Polyester	3.0 mil (75 micron) Clear Polyester	3.0 mil (75 micron) Clear Polyester	3.0 mil (75 micron) Clear Polyester	3.0 mil (75 micron) Clear Polyester

Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Refractive Index:

Abe Refractometer

3M™ Optically Clear Adhesive 826X

1.48

Haze:

Haze was measured according to ASTM D1003.

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0.5%



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Typical Physical Properties and Performance Characteristics (continued)

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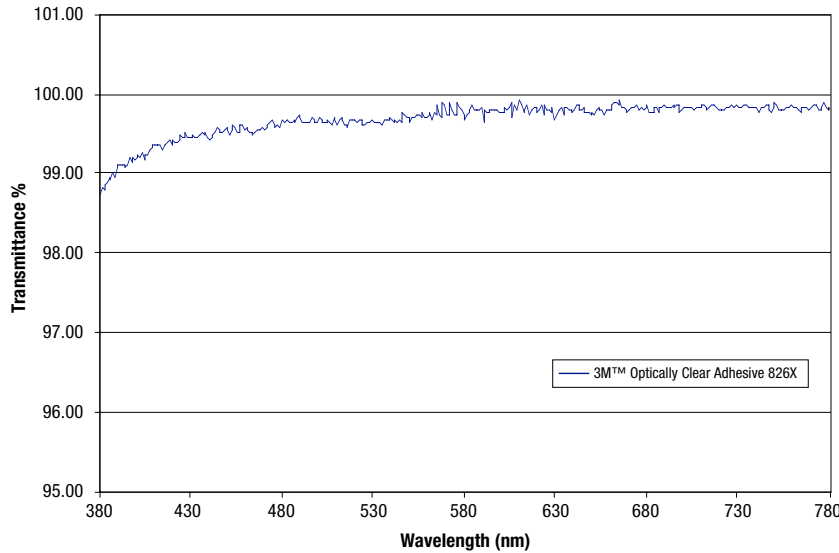
Transmission:

ASTM E903, D1003, and E284

Reflective-Corrected Total Luminous

Transmission vs. Wavelength

3M™ Optically Clear Adhesive 826X



Color:

ASTM-E1164-07 / CIELAB

(BYK Gardner TCS Plus spectrophotometer, model 8870)

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$L^* = 97.02$

$a^* = -0.06$

$b^* = 0.20$

Peel Adhesion:

ASTM D3330 modified, 180° peel, 12 in/min, 2 mil polyester backing. Units: Oz/in

Units	Float Glass				PC				PMMA				PET			
	20 minute dwell		3 days dwell		20 minute dwell		3 days dwell		20 minute dwell		3 days dwell		20 minute dwell		3 days dwell	
	Oz/in	N/100mm	Oz/in	N/100mm	Oz/in	N/100mm	Oz/in	N/100mm	Oz/in	N/100mm	Oz/in	N/100mm	Oz/in	N/100mm	Oz/in	N/100mm
8261	58	63	36	39	36	39	33	36	35	39	37	41	49	54	35	38
8262	70	77	74	81	54	59	81	89	60	66	63	69	58	64	57	62
8263	72	79	79	87	57	62	83	91	62	67	67	73	59	65	60	66
8264	73	80	83	91	69	76	90	98	69	75	70	77	64	71	66	72
8265	81	88	92	101	70	76	98	108	72	79	76	83	65	71	68	75

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Typical Physical Properties and Performance Characteristics (continued)

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Durability:

3M™ Optically Clear Adhesives 826X are laminated between two different substrates and subjected to high temperature/humidity condition for 3 days.

Substrate Configuration	60°C / 90% RH
PMMA (1mm) - Glass (1mm)	Pass
PC (1mm) - Glass (1mm)	Pass
PMMA (1mm) - Polarizer on glass	Pass
PC (1mm) - Polarizer on glass	Pass

*Pass – No visual defect due to aging including bubbles, delamination or blisters.

Typical Electrical Properties of 3M™ Optically Clear Adhesive 826X at 25°C and 1 KHz.

ASTM-D150-92

Product	Dielectric Constant	Tan (Delta)
826X	5.2	0.0377

Shelf Life:

Product retains its performance and properties for two years from date of manufacture if properly stored at room temperature conditions of 72°F (22°C) and 50 relative humidity. Storage in plastic bag is recommended.

Available Sizes

Available Lengths (subject to minimum order requirements): Maximum length - 3M™ Optically Clear Adhesive 826X	180 yards or 540 feet
Available Widths (subject to minimum order requirements): Maximum width - 3M™ Optically Clear Adhesive 826X	60 inches
Normal Slitting Tolerance	± 1/32 in. (0.8 mm)
Core Size	3.0 in. (76.2 mm)

Application Techniques

For maximum bond strength the surface should be thoroughly cleaned and dried. To obtain greatest benefit, laminations should be done in the cleanest environment possible with static charge elimination.

Bond strength can be improved with firm application pressure and moderate heat causing the adhesive to develop intimate contact with the bonding surface.

General Information

- Light transmission >99% when corrected for reflection losses.
- Haze level < 2%.
- Free of birefringence with no film carrier.
- High interfacial adhesion.
- Non-whitening at high temperature/humidity.
- Enhanced durability on outgassing substrates (PC, PMMA).
- Bare ITO compatible for touch applications.
- High temperature, humidity, and UV resistance.
- Long term durability without yellowing, delaminating, or degrading.
- High cohesive and peel strength for reliably bonding most transparent substrates.
- Wound on plastic cores and wrapped in plastic to eliminate paper fiber contamination.
- Two film liners for optimum adhesive smoothness and differential release for ease of processing and protection from contamination.

Application Ideas

- Touchscreens- for bonding film and glass laminates.
- Transparent graphic overlays.
- Projection screens.
- Avionics/military displays.
- Optical management films for LCD

Processing:

Laminating

Recommended nip roll or roller platen press type laminator to maintain optical aesthetics when laminated. Hand lamination not advised. Use best process control standards possible to control variables. (See **3M Laminating Technical Bulletin** for additional information.)

Certification/Recognition

MSDS: 3M has not prepared a MSDS for these products which are not subject to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R. 1910.1200(b)(6)(v). When used under reasonable conditions or in accordance with the 3M directions for use, these products should not present a health and safety hazard. However, use or processing of the products in a manner not in accordance with the directions for use may affect their performance and present potential health and safety hazards.

TSCA: These products are defined as an article under the Toxic Substances Control Act and therefore, are exempt from inventory listing requirements.

RoHs Complaint/REACH Compliant: These products comply with the European Union's "Restriction of Hazardous Substances" (RoHs) initiative and with European REACH regulations 2002/95/EC and 2005/618/EC.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-866-599-4227. Address correspondence to: 3M, Electronics Markets Materials Division, 3M Center, Building 225-3S-06, St. Paul, MN 55144-1000. Our fax number is 651-778-4244 or 1-877-369-2923. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

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