

3M™ Contrast Enhancement Film

CEF1574-X



Product Description

3M™ CEF1574-X is a specialized optically clear adhesive (OCA) offering excellent clarity and adhesion to various transparent display substrates. CEF1574-X is designed for applications that require OCA for blocking UV transmittance (under 380nm wavelength), long shelf life and high adhesion. CEF1574-X is PSA type OCA (no UV curing required).

Construction

Product	CEF1574-3	CEF1574-4	CEF1574-6
Adhesive Type:	Acrylic	Acrylic	Acrylic
Adhesive Carrier:	None	None	None
Approximate Thickness:			
Release Liner:	50 um (2.0 mils) Clear Polyester	50 um (2.0 mils) Clear Polyester	50 um (2.0 mils) Clear Polyester
Adhesive:	75 um (3.0 mils)	100 um (4.0 mils)	150 um (6.0 mils)
Release Liner:	75 um (3.0 mils) Clear Polyester	75 um (3.0 mils) Clear Polyester	75 um (3.0 mils) Clear Polyester

The 3M family of optically clear adhesives for electronic displays are usually available in two forms. 3M OCA come in roll good form. 3M Contrast Enhancement Films (CEF) are available in die-cut form.

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.

Property	CEF1574
Dielectric Constant ¹ (100 kHz)	4.65
Dielectric Constant ¹ (300 kHz)	4.34
Refractive Index ²	1.48

Environmental Performance:

CEF1574-X

Reliability	Tensile Adhesion ³ (N/cm ²)	Shear Adhesion ⁴ (N/cm ²)	Peel Adhesion ⁴ (N/cm)	% Transmission ⁵ (380/420 nm)	Color-a* ⁶	Color-b* ⁶	% Haze ⁶
CEF1574-3 Initial	304	270	9.3	<3/99	-0.20	0.57	0.19
CEF1574-3 65°C/90%RH/800hrs	231	236	11.6	<3/99	-0.22	0.62	0.16
CEF1574-4 Initial	277	246	9.7	<3/99	-0.16	0.52	0.17
CEF1574-4 65°C/90%RH/800hrs	231	218	10.8	<3/99	-0.19	0.57	0.17
CEF1574-6 Initial	355	245	9.6	<3/99	-0.15	0.47	0.30
CEF1574-6 65°C/90%RH/800hrs	279	238	12.9	<3/99	-0.18	0.56	0.18

Storage and Handling

- Avoid applying pressure or resting objects on the product to prevent marking, denting, or deforming the surface.
- Wear gloves to prevent fingerprints or nail marks when handling.
- Product needs to be unpacked and handled in a clean-room facility.
- Store in sealed, foil bag under room temperature and between 40 – 60% relative humidity.

Regulatory

For regulatory information about this product, please contact your 3M representative.

¹ Dielectric constant measured per ASTM D150-92 on cured OCA at 300 um thickness

² Refractive index measured at 632.8 nm on cured OCA

³ Tensile and shear adhesion construction is float glass/CEF/float glass, measured using MTS equipment at 25 mm/min

⁴ 180° peel from float glass, 60 mm/min, 2.0 mil polyester backing

⁵ Transmission, color and haze measured using Hunter Lab Ultrascan Pro equipment, OCA on LCD glass with liner removed

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

Many factors beyond 3M's control and uniquely within the user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for determining if the product is fit for a particular purpose and suitable for user's method of application.

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