## Gloss Overlaminate 3658G Matte Overlaminate 3660M

## **Product Description**

- Protection from UV fading, dirt
- Easy to clean
- Thermoformable on plastic substrates

## Recommended Types of Graphics and End Uses

- Signage
- Awnings
- May use on <u>3M™ Scotchcal™ Translucent Graphic Film Series 3630</u> and <u>3M™ Envision™ Translucent Film Series 3730</u>
- May use on digitally or screen printed <u>3M™ Panagraphics™ III Wide Width Flexible Substrate</u>
- Expected performance life of 9 years (unwarranted period applied to a flat, vertical, outdoor surface)

## Characteristics

These are typical values for unprocessed product. Processing may change the values.

## Performance Characteristics

Characteristic	Value
Material	Vinyl
Cast or non-Cast	Cast
Thickness	2 mils
Gloss	<b>3658G:</b> Gloss <b>3660M:</b> Matte
Liner	Kraft paper
Lamination Temperature	50 to 100 °F (10 to +38 °C)
In Use Temperature Range	-65 to +200 °F (-54 to +93 °C)
Chemical Resistance	<ul> <li>Resists mild alkalis, mild acids, and salt</li> <li>Excellent resistance to water (does not include immersion)</li> <li>Resists occasional fuel spills</li> </ul>
Flammability	ASTM E84 test reports are available on the On-line Product Catalog at <u>3Mgraphics.com</u> (select a product and view its Literature tab) or call 3M at 1-800-328-3908.

# Warranty Information

All 3M graphic protection products are covered by the 3M Basic Product Warranty.

A warranty period may be offered based on the graphic construction and application details. Always refer to the 3M Product Bulletin for the 3M base film or flexible substrate you are using to determine if the graphic protection product you want to use is recommended and what, if any warranty period is offered.

Warranty information including limitations and exceptions and warranty periods for this product can be found at <u>3M.com/</u><u>graphicswarranties</u>.

<u>3M Graphics Warranties</u> <u>Technical Information Selector</u> <u>Safety Data Sheets (SDS)</u> <u>Flammability</u> <u>Videos</u>

**Quick Links** 

Some of these links lead to web-based resources that are not product-specific.



## Warranty Coverage Overview

The warranty coverage for eligible graphics is based on the user both reading and following all applicable and current 3M Graphics Product and Instruction Bulletins. The warranty period for eligible graphics is as stated in the 3M Graphics Warranties Matrices at the time that the film was purchased. Information found at <u>3M.com/graphicswarranties</u> includes:

- <u>3M Graphics Warranties Bulletin</u>
  - This bulletin contains information on limitations and exceptions, and warranty period reductions for 3M Graphics Warranties. The warranty period may be reduced and stipulations may apply for certain constructions, applications, and graphic exposures as covered in this Bulletin.
- <u>3M Graphics Warranties Selector</u>
  - Use this selector to search for your vertical warranty period by product type, ink type, film name, and/or ink/printer platform.
- U.S. Desert Southwest Region Map
  - Use this map of hot, arid desert areas to determine if you are subject to reduced warranted durabilities.

The warranties set forth in this Bulletin are made in lieu of all other express or implied warranties, including any implied warranty of merchantability, fitness for a particular purpose, or arising out of a course of dealing, custom, or usage of trade.

## 3M Basic Product Warranty

3M Graphics Products are warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in its applicable 3M Graphics Product Bulletin and as further set forth in the <u>3M Graphics Warranties Bulletin</u>.

## Limited Remedy

The limited remedy applicable to each warranty is addressed in the 3M Graphics Warranties Bulletin found at <u>3M.com/graphicswarranties</u>.

### Limitation of Liability

Except to the extent prohibited by law, 3M SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO PURCHASER OR USER FOR ANY DIRECT (EXCEPT FOR THE LIMITED REMEDY PROVIDED HEREIN), INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LABOR, NON-3M MATERIAL CHARGES, LOSS OF PROFITS, REVENUE, BUSINESS, OPPORTUNITY, OR GOODWILL) RESULTING FROM OR IN ANY WAY RELATED TO 3M'S GRAPHICS PRODUCTS, SERVICES, OR THIS BULLETIN. This limitation of liability applies regardless of the legal or equitable theory under which such losses or damages are sought.

### Warranty Period Matrices

See the 3M Graphics Warranties Matrices at <u>3M.com/graphicswarranties</u>, for vertical warranty period information specific to your film.

## Additional Limitations

See the 3M Graphics Warranties Bulletin at <u>3MGraphics.com/warranties</u>, for terms, additional limitations of your warranty, if any, information on reduced warranties for different exposures, and limitations of liability.

## Health and Safety

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When handling any chemical products, read the manufacturers' container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information. To obtain SDS sheets for 3M products go to <u>3M.com/SDS</u>, or by mail or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturer's instructions for safe operation.

### **Air Quality Regulations**

State Volatile Organic Compound (VOC) regulations may prohibit the use of certain chemicals with VOC's in graphic arts coatings and printing operations. For example, the California South Coast Air Quality Management District prohibits use of certain solvent-based solutions without a permit and other California AQMD's prohibit use of certain solutions without a permit or regulatory exemption. Check with your State environmental authorities to determine whether use of this solution may be restricted or prohibited.

# Factors that Affect Graphic Performance Life

The actual performance life of a graphic is affected by:

- the combinations of graphics materials used.
- complete ink drying or curing.
- selection, condition and preparation of the substrate.
- surface texture.
- application methods.
- angle and direction of sun exposure.
- environmental conditions.
- cleaning or maintenance methods.

## **Graphics Manufacturing**

# A CAUTION

Before using any equipment, always read the manufacturer's instructions for safe operation.

#### **Completely Dry Graphics**

#### (i) IMPORTANT NOTE

Incomplete drying or curing can result in graphic failure including curling, increased shrinkage and adhesion failure, which are not covered under any 3M Graphic Warranty.

See the specific ink's 3M Product and Instruction Bulletin for more details.

### **Graphic Protection**

Graphic protection may improve the appearance, performance and durability of the graphic. See the <u>3M Graphics Market Product Catalog</u>, for more information.

### **Application Tapes**

There are two types of application tapes. See <u>3M Instruction Bulletin AT-1</u> to determine what application tape is recommended for the film or finished graphic.

#### **Premasking Tape**

Increases stiffness during application while preventing stretching and damage. Use when little or no liner is exposed. See <u>3M Instruction</u> <u>Bulletin 4.3</u> for complete details.

#### **Prespacing Tape**

Holds cut and weeded letters or graphics in place during application and after removing the film liner, while preventing stretching and damage. Use when large amounts of liner are exposed. See <u>3M Instruction Bulletin 4.3</u> for complete details.

# Application and Installation

In addition to other 3M Bulletins specified in this document, the following Bulletins provide details that you may need to successfully apply a graphic.

- <u>3M Instruction Bulletin 4.22</u> Lamination Basics for Inkjet Printed Graphics
- <u>3M Instruction Bulletin 5.7</u>. Wet Method for Translucent, Inkjet, Screen Printed and Cut Graphics.

## Maintenance and Cleaning

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline). See <u>3M Instruction Bulletin 6.5</u> for details.

# Shelf Life, Storage and Shipping

#### Shelf Life

The shelf life is never more than 3 years from the date of manufacture on the original box.

If you process the film, the shelf life is changed to **1 year** from the processing date, but not later than the 3 year maximum from the manufacturing date.

### Storage Conditions

- 40° to 90°F (4° to 32°C)
- Out of sunlight
- Clean, dry area
- Original container
- Bring the film to room temperature before use

#### Shipping Finished Graphics

Flat and racked is preferred. If rolling, roll printed side out on a core at least 6 inch (15 cm) in diarmeter or larger. All graphics with reflective base films must use this large a core. This helps prevent the application tape, if used, from popping off.

