Release A, August 2015

3M Graphics Warranties

<u>Technical Information Selector</u> Safety Data Sheets (SDS)

Flammability (ASTM E84 Reports)

Some of these links lead to web-based resources

that are not product-specific.

Quick Links

Videos

Luster Overlaminate 3645 Matte Overlaminate 3647

Product Description

- · Provides slip and scuff resistance
- Scrubable and waxable

Recommended Types of Graphics and End Uses

- Luster Overlaminate 3645 for floor and some vertical graphics
- Matter Overlaminate 3647 for sidewalk signs
- 3645: Expected performance life of 1 year (unwarranted period applied to a flat, vertical, outdoor surface)
- 3647: Expected performance life of 0.25 year (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	3645: 8 mils 3647: 19 mils
Gloss	3645: Luster 3647: Matte
Liner	Kraft paper
Lamination Temperature	50 to 100 °F (10 to +38 °C)
In Use Temperature Range	-65 to +225 °F (-54 to +107 °C)
Chemical Resistance	 Resists mild alkalis, mild acids, and salt Excellent resistance to water (does not include immersion) Resists occasional fuel spills
Flammability	Flammability test data may be available for the graphic product and application you require. ASTM E84 test reports are available on the On-line Product Catalog at 3Mgraphics.com (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.

(i) IMPORTANT NOTE

Warranty information including limitations and exceptions and warranty periods for this product can be found at 3Mgraphics.com/warranty warranties.



(i) IMPORTANT NOTE

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>3Mgraphics.com/warranties</u> includes:

- 3M Graphics Warranties Bulletin
 - 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 and applications, and graphic exposures as covered in this Bulletin.
- 3M Graphics Warranties Selector
 - Use this selector to search for your vertical warranty period by product number, ink type, and 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 3M Graphics Warranties Bulletin.

Limited Remedy

The limited remedy applicable to each warranty is addressed in the 3M Graphics Warranties Bulletin found at 3MGraphics.com/warranties.

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 3MGraphics.com/warranties, for vertical warranty period information specific to your film.

Additional Limitations

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

Health and Safety



CAUTION

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 3M.com/SDS, 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 manufacturers' 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.

Slip Resistance for Floor or Sidewalk Sign Graphics

The UL 410 Slip Resistance of Floor Surface Materials covers the testing of floor and finishing materials to determine if their minimum average and minimum individual static coefficients of friction (COF) meet or exceed the specified requirements with respect to slip resistance only. The floor surface materials covered by this standard include floor coverings (FCM), floor treatment materials (FTM) and walkway construction materials (WCM). The average static coefficient of friction for FTM, FCM, and WCM products shall be at least 0.50 and individual static coefficients of friction shall be at least 0.45 when tested in accordance with the requirements of this standard

Method: The floor samples were tested dry only. The slip resistance characteristics of the materials were measured in accordance with the established and standardized practice of Underwriters Laboratories Inc. and in accordance with the latest Standard of Slip Resistance of Floor Surface Materials, UL 410.

Results: An average slip resistance characteristic greater than 0.50 was recorded for each of the materials tested.



(i) IMPORTANT NOTE

Overlaminate 3647 has been tested per ASTM E303, "Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester", and meets the requirements of the skid resistance values, or British Pendulum Number (BPN), as set forth in the proposed European norms prEN1341 and prEN1342 for pedestrian surfaces. Dry Surface: BPN = 95; Wet Surface: BPN = 40.

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



CAUTION

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

Graphic Protection

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

Application Tapes

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

• 3M Instruction Bulletin 4.22. Lamination Basics for Inkjet Printed Graphics.

Maintenance and Cleaning

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong 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 1 year** from the date of manufacture on the original box.

Storage Conditions

- at an ambient temperature less than 86 °F (30 °C)
- Out of sunlight
- · Clean, dry area
- · Original container
- Bring the film to print room temperature before using

Shipping Finished Graphics

Flat, or rolled printed side out on 6 inch (15 cm) or larger core. This helps prevent the liner, and, if used, the application tape from popping off.

3M Commercial Solutions

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