Product Description

- 2-mil, vinyl translucent films, available in crisp, clear colors (many with simulated PANTONE® color references)
- For Screen Printing, Cut Graphics, and Thermoforming
  - Use film series 3630 for fluorescent lighting applications
  - Use film series 3730 for LED applications

Product Features

- Matte surface finish eliminates glare and provides uniform color in reflected and transmitted light
- Pressure sensitive, permanent adhesive adheres to rigid and flexible substrates
- Synthetic, lay-flat liner that is not affected by water or humidity
- Cut electronically
- Thermoformable
- Permanent film
- Expected Performance Life of 7 years (unwarranted period for unprinted film with no graphic protection, applied to a flat, vertical, outdoor surface)

Recommended Types of Graphics and End Uses

- For indoor or outdoor use on internally-illuminated sign faces
- First and second surface application on rigid substrates
- First surface applications only on flexible substrates
- Thermoforming on rigid plastic substrates
- For use with fluorescent bulbs or LEDs. Typically for best results, 3M recommends:
  - film 3630 for fluorescent light applications
  - film 3730 for LED applications

When constructed and used as described in this Bulletin, these types of graphics and end uses may be warranted by the 3M™ MCS™ Warranty. Please read the entire Bulletin for details.

Special Considerations

3M recommends weeding before thermoforming when using film with red pigments. The red pigments available to film manufacturers today can stain plastic when thermoformed.

3M is very successful at helping you match day/night colors when the same color density is required in front lit and backlit graphics to maximize the effectiveness of your sign. Please contact 3M for assistance when this is a concern.

Recommended Compatible Products

Screen Printing Inks

- 3M™ Screen Printing Ink Series 1900
- 3M™ Screen Printing UV Ink Series 9800

Films

- [3M™ Day/Night Film 3635-91](#)
- [3M™ Diffuser Film 3635-30](#)
- [3M™ Diffuser Film 3635-70](#)
- [3M™ Envision™ Diffuser Film 3735-50](#)
- [3M™ Envision™ Diffuser Film 3735-60](#)
- [3M™ Blockout Film 3635-20B](#)
- [3M™ Blockout Film 3635-22B](#)
- [3M™ Dual-Color Film Series 3635-200](#)

Substrates

- [3M™ Panagraphics™ III Wide-Width Flexible Substrate](#)
- [3M™ Envision™ Flexible Substrate FS-1](#)
- Flat, rigid substrates, see "Application Characteristics" on page 3

Graphic Protection

- [3M™ Scotchcal™ Gloss Overlaminate 3658G](#)
- [3M™ Scotchcal™ Matte Overlaminate 3660M](#)
- [3M™ Scotchcal™ Gloss Overlaminate 3640GPS](#)
- [3M™ Scotchcal™ Matte Overlaminate 3642GPS](#)
- [3M™ Screen Print Gloss Clear 1920DR](#)
- [3M™ Screen Print UV Gloss Clear 9740i](#)
- [3M™ Screen Print UV Gloss Clear 9800CL](#)

Application Tapes

See [3M Instruction Bulletin AT-1](#) to determine what application tape is recommended for your film or finished graphic.

Characteristics

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

Physical Characteristics

Characteristic	Value
Material	Vinyl
Color	**Film 3630:** Translucent, 78 colors **Film 3730:** Translucent, 25 colors See "Colors" on page 3.
Thickness	**Without adhesive:** 2 mil (0.05 mm) **With adhesive:** 3 – 4 mil (0.08 – 0.1 mm)
Adhesive	Pressure-sensitive
Adhesive Color	Clear
Liner	Translucent, synthetic lay-flat liner
Adhesion, Typical *24 hours after application*	**Acrylic and uncoated, clear polycarbonate:** 4 pounds/inch (0.7 kg/cm)
Chemical Resistance	• Resists mild alkalis, mild acids, and salt • Excellent resistance to water *(does not include immersion)*
Flammability	ASTM E84 reports: [3630](#) and [3730](#) or go to the On-line Product Catalog at 3Mgraphics.com **All other test reports:** call 1-800-328-3908

Application Characteristics

Characteristic	Value
Finished Graphic Application Recommendation	**Surface type:** Flat, without rivets **Surface type*:** 3M flexible substrates; rigid substrates such as flat acrylic, polycarbonate**, high temperature co-polyester sheet, glass **Application method:** Wet or Dry, typical **Application temperature:** 60 °F (16 °C) minimum air, substrate
Temperature Range After Application	-50 to +170 °F (-45 to +77 °C) (not for extended periods of time at the extremes) Low temperatures impacts on film applied to flexible substrates may result in cracking of the film and/or substrate
Recommended Light Source (for best results)	**Film 3630:** Fluorescent bulbs **Film 3730:** LEDs
Graphic Removal	Permanent

*These films typically adhere to solar-grade polycarbonate substrate. However, some lots of this substrate may inhibit adhesion.
See 3M Instruction Bulletin 5.7 for additional information.
**Polycarbonate substrates require oven drying before use to remove moisture from the polycarbonate that will cause the film to bubble.
Refer to manufacturers instructions for proper drying times and temperatures.

ⓘ **IMPORTANT NOTE**

The user is responsible for determining and complying with all applicable building codes that affect the use of materials in interior and exterior awning, banner and sign face applications, including flammability standards. For more information on flammability requirements, contact your local building code officials. For information on the results of flammability testing on 3M flexible substrates, call 1-800-328-3908.

Colors

Colors shown on monitor and when printed are approximate representations of actual color available.

Some of these products are a simulation of the closest PANTONE®-identified color standard. Consult current PANTONE Color Publications for accurate color. PANTONE® is a trademark or registered trademark of Pantone LLC in the United States and/or other countries.

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ⓘ **IMPORTANT NOTE**

All color references are based on reflected, not transmitted, light viewing.

Color Chart for Film Series 3630

| Product Color	PANTONE Color	Product Color	PANTONE Color	Product Color	PANTONE Color
3630-005 Ivory	PANTONE 7500 C	3630-74 Kumquat Orange	PANTONE 151 C	3630-137 European Blue	PANTONE 2757 C
3630-015 Yellow	PANTONE 116 C	3630-75 Marigold	PANTONE 7549	3630-141 Gold Nugget	Not Available
3630-20 White	Not Available	3630-76 Holly Green	PANTONE 7734 C	3630-143 Poppy Red	PANTONE 485 C
3630-22 Black	PANTONE Black C	New! 3630-77 Indigo	Not Available	New! 3630-144 Poppy Orange	Not Available
3630-25 Sunflower	PANTONE 130 C	3630-78 Vivid Rose	PANTONE 206 C	3630-146 Lt. Kelly Green	PANTONE 340 C
3630-26 Green	PANTONE 7727 C	3630-83 Regal Red	Not Available	3630-147 Lt. European Blue	PANTONE 7690 C
New! 3630-27 Electric Blue	Not Available	3630-84 Tangerine	PANTONE 1575 C	3630-149 Light Beige	Not Available
3630-33 Red	PANTONE 1797 C	New! 3630-86 Blue Lagoon	Not Available	3630-156 Vivid Green	Not Available
3630-36 Blue	PANTONE 281 C	3630-87 Royal Blue	PANTONE 2745 C	3630-157 Sultan Blue	PANTONE 287 C
New! 3630-37 Sapphire	Not Available	New! 3630-93 Fire Engine Red	Not Available	New! 3630-158 Bright Violet	Not Available
New! 3630-38 Fuchsia	Not Available	3630-97 Bristol Blue	Not Available	New! 3630-163 Scarlet	Not Available
New! 3630-39 Warm Beige	Not Available	New! 3630-98 Electric Pink	Not Available	3630-167 Bright Blue	PANTONE 2945 C
3630-43 Lt. Tomato Red	Not Available	3630-106 Brilliant Green	PANTONE 368 C	New! 3630-187 Infinity Blue	Not Available
3630-44 Orange	Not Available	New! 3630-111 Dover White	Not Available	New! 3630-196 Forest	Not Available
New! 3630-47 Patriot Blue	Not Available	3630-115 Lt. Lemon Yellow	Not Available	New! 3630-216 Blue Coral	Not Available
3630-49 Burgundy	Not Available	3630-118 Intense Magenta	PANTONE 241 C	New! 3630-217 Deep Sea Blue	Not Available
3630-51 Silver Gray	Not Available	3630-121 Silver	PANTONE 877 C	New! 3630-227 Azure	Not Available
3630-53 Cardinal Red	PANTONE 187 C	New! 3630-124 Burnt Orange	Not Available	New! 3630-235 Autumn Yellow	Not Available
New! 3630-56 Glacial Green	Not Available	3630-125 Golden Yellow	PANTONE 1235 C	3630-236 Turquoise	PANTONE 3282 C
3630-57 Olympic Blue	Not Available	3630-126 Dk Emerald Green	PANTONE 3425 C	3630-246 Teal Green	PANTONE 321 C
3630-59 Dark Brown	Not Available	3630-127 Intense Blue	PANTONE 300 C	New! 3630-276 Kentucky Blue Grass	Not Available
3630-61 Slate Gray	Not Available	3630-128 Plum Purple	PANTONE 525 C	New! 3630-287 Marine Blue	Not Available
3630-63 Rust Brown	PANTONE 7610 C	3630-131 Gold Metallic	PANTONE 872 C	New! 3630-297 Twilight Blue	Not Available
3630-69 Duranodic	PANTONE Black 7 C	3630-133 Raspberry	PANTONE 220 C	New! 3630-316 Jade Green	Not Available
3630-71 Shadow Gray	PANTONE Warm Gray 7 C	New! 3630-135 Yellow Rose	Not Available	New! 3630-328 Berry Burgundy	Not Available
3630-73 Dark Red	PANTONE 7621 C	3630-136 Lime Green	PANTONE 360 C	3630-337 Process Blue	Not Available

* Films 3630-22 and 3630-69 are effectively opaque for most sign uses.

Color Chart for Film Series 3730

Product Color	PANTONE Color	Product Color	PANTONE Color	Product Color	PANTONE Color
3730-015L Yellow	PANTONE 116 C	**New!** 3730-57L Olympic Blue	Not Available	**New!** 3730-128L Plum Purple	Not Available
3730-20L White	Not Available	3730-73L Dark Red	Not Available	**New!** 3730-133L Raspberry	Not Available
3730-26L Green	PANTONE 7727 C	**New!** 3730-76L Holly Green	Not Available	3730-137L European Blue	Not Available
3730-33L Red	PANTONE 186 C	**New!** 3730-83L Regal Red	Not Available	3730-156L Vivid Green	PANTONE 348 C
3730-36L Blue	Not Available	3730-97L Bristol Blue	Not Available	3730-157L Sultan Blue	Not Available
3730-43L Lt. Tomato Red	PANTONE 1795 C	3730-106L Brilliant Green	Not Available	3730-167L Bright Blue	PANTONE 2935 C
3730-44L Orange	Not Available	3730-125L Golden Yellow	PANTONE 1235 C	**New!** 3730-246L Teal Green	Not Available
New! 3730-49L Burgundy	Not Available	3730-127L Intense Blue	Not Available	3730-337L Process Blue	Not Available
3730-53L Cardinal Red	PANTONE 200 C				

Custom Colors and Color Matching

- Custom colors are available by request. Pigment durability and manufacturing limitations do not permit exact color matching of all color shades.
- When viewed in reflected light and not illuminated, similar colors in film series 3630 and 3730 will look the same.
- Because film series 3630 and 3730 are optimized for different light sources, an exact color match between these two colored films may not be possible when illuminated. 3M formulates the film series 3730 colors to the closest color match as possible; however, in some instances a slight color variation between the products may be noticeable in transmitted light.
- The "L" behind a color number (e.g., 3730-33L) designates the color is optimized for LED light sources.

Warranty Information

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 3MGraphics.com/warranties 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, 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 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.

Exposure Types

U.S. Vertical Exposure

The face of the graphic is ±10° from vertical.

U.S. Non-Vertical Exposure

The face of the graphic is greater than 10° from vertical and greater than 5° from horizontal.

NOTE: Any outdoor graphic primarily located in Arizona, New Mexico, and the desert areas of California, Nevada, Utah, and Texas is subject to reduced warranties. Click here for a detailed map or go to 3Mgraphics.com/warranties. See "Reduced Warranty Period for Other Graphic Exposures" on page 5 for reduced warranty period information.

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 for Finished Graphics

Non-Thermoformed Outdoor Signs

Table A. Non-Thermoformed Outdoor Signs Warranty Period (in years) for Finished Graphics in U.S. Vertical and Horizontal Exposures (see 3M Graphics Warranties Bulletin for Graphic Type Definitions and Exposure Definitions).

Substrate	Application Surface	Decoration Method	Graphic Protection	U.S. Exposure		U.S Desert Southwest Exposure	
				Vertical	Non-Vertical	Vertical	Non-Vertical
Panagraphics III, FS-1	First	Unprinted film	None*	6	0	4.2	0
	First	Unprinted film	3658G 3660M	9	6	6.3	4.2
	First	Printed with ink 1900	1920DR	5	0	3.5	0
	First	Printed with UV ink 9800	9800CL 9740i	5	0	3.5	0
PETG, Glass, Acrylic or Non-solar grade polycarbonate	First	Unprinted film	None*	6	0	4.2	0
	First	Unprinted film	3640GPS 3642GPS	9	6	6.3	4.2
	First	Unprinted film	3658G 3660M	9	6	6.3	4.2
	First	Printed with ink 1900	1920DR	5	4	3.5	2.8
	First	Printed with UV ink 9800	9800CL 9740i	5	4	3.5	2.8
Non-solar grade polycarbonate	Second	Unprinted film	None	6	0	4.2	0
Solar grade polycarbonate, acrylic, or UV grade PETG	Second	Unprinted film	None	9	6	6.3	4.2

* Although the durability of these constructions are warranted without graphic protection in a vertical orientation, 3M strongly recommends using graphic protection to keep the graphic looking good.

Thermoformed Outdoor Signs

Table B. Thermoformed Outdoor Signs Warranty Period (in years) for Finished Graphics in U.S. Exposures (see 3M Graphics Warranties Bulletin for Graphic Type Definitions and Exposure Definitions).

Substrate	Application Surface	Decoration Method**	Graphic Protection	U.S. Exposure Complete Sign Face*	U.S Desert Southwest Exposure Complete Sign Face*
Acrylic, PETG, or Non-Solar grade polycarbonate	First	Unprinted film	None*	4	2.8
	First	Unprinted film	3640GPS 3642GPS	6	4.2
	First	Unprinted film	3658G 3660M	6	4.2
Non-Solar grade polycarbonate	Second	Unprinted film	None	4	2.8
Acrylic or Solar grade polycarbonate	Second	Unprinted film	None	6	4.2

* When the theromformed sign is vertically mounted.
** Thermoformed signs not warranted for metallic colors 3630-121, 3630-131 or 3630-141.

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.

Factors that Affect Graphic Performance Life

The actual performance life of a graphic is affected by:

- the correct combinations of 3M-recommended graphics products.
- the ink formulation.
- 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.

⚠️ **CAUTION**

Illuminated Signs Require Special Consideration

Clear and translucent films tend to be more sensitive to shrinkage when printed with high total ink coverage. Printed film that is not sufficiently dried prior to creating an overlap may shrink and result in a light leak.

Backlighting any film, no matter how it is imaged, may reduce the density of the colors on the image.

Illuminated Signs Using LEDs

Making a successful sign requires that you consider many factors. This section provides general guidelines for illuminating signs using LEDs. Please contact Technical Service (1-800-328-3908) before you start for any questions or concerns about making a sign.

Comparing Light Transmission using LEDs

3M™ Envision™ Translucent Films 3730 are designed to deliver an increase in light transmission compared to 3M™ Scotchcal™ Translucent Films 3630.

Table C. Light Transmission Comparison using LEDs

Film		Typical % Increase (Gain) in Light Transmission (New Calculation)*
Product Number 3630-xxx/3730-xxx	Color	When Comparing Unmounted Film with Adhesive - 3630 Series to Similar 3730 Series
015 / 015L	Yellow	2
20 / 20L	White	49
33 / 33L	Red	80
43 / 43L	Lt. Tomato Red	27
44 / 44L	Orange	20
49 / 49L	Burgundy	N/A
57 / 57L	Olympic Blue	N/A
73 / 73L	Dark Red	51
76 / 76L	Holly Green	N/A
83 / 83L	Regal Red	N/A
106 / 106L	Brilliant Green	26
125 / 125L	Golden Yellow	29
127 / 127L	Intense Blue	8
128 / 128L	Plum Purple	N/A
133 / 133L	Raspberry	N/A
156 / 156L	Vivid Green	41
157 / 157L	Sultan Blue	22
167 / 167L	Bright Blue	69
246 / 246L	Teal Green	N/A
337 / 337L	Process Blue	25

* Previous gain measurements included film mounted to substrate with diffuser.
The new gain is based on measurements of the increase in transmitted brightness (CIE Cap Y) of the film only.
Analysis and instrumentation covered by ASTMs D1003 (Proc B), E1164, and E308.

N/A - Data not available at time of publishing

Color-to-Color Variation for Gain

The variation in gain from color-to-color can be attributed to the different film color formulations. In general, every color in film series 3630 and 3730 produces its own unique light transmission value.

Other Considerations for Signs using LEDs

- A significant reduction in LEDs may affect other performance factors of an illuminated sign, such as uniformity. The user is responsible for ensuring the LED layout meets all of its intended performance requirements.
- If the brightness of signs created using a film 3630 construction is acceptable, then:
  - a comparable brightness may be achieved using films 3730 with fewer LEDs.
  - a similar level of brightness for white may be maintained.
  - an acceptable sign face uniformity may be maintained without requiring any change to the light box depth if the LED layout is adjusted properly.
- Some sign box manufacturers prefer to apply color translucent films directly to a rigid diffuse substrate, such as diffuse polycarbonate or acrylic; instead of using diffuser film. In this case, there will still be an increase in light output over the use of 3630 films, however, the gain in light transmission for using 3730 films would be less than the values shown in the "Comparing Light Transmission using LEDs" on page 8.
- See 3M Instruction Bulletin 4.60 for some additional guidelines and suggestions when using 3M™ Envision™ Translucent and Diffuser Films.

Video

Click here to see a brief lightbox demonstration comparing film series 3730 to film series 3630.

Screen Printing

Formulations and processing conditions can affect ink durability. Refer to the Product and Instruction Bulletins for your ink for limitations and proper usage.

Graphic Protection can improve the appearance, performance, and durability of your graphic. A clear coat also prevents chalking on unprinted films.

Whether you apply screen print clears with traditional screening methods or roller coating, use equipment designed to handle high viscosity materials and make sure the coating is evenly applied to the specifications in the clear's Instruction Bulletin.

Construction Options

See 3M Instruction Bulletin 4.26 for detailed information.

Maximum Three Layers of Film

> ⓘ **IMPORTANT NOTE**
>
> A third layer of film on any one surface is warranted only if the top layer is an approved overlaminate and no more than two layers of any film are even with the edges of the substrate.
>
> NEVER place an overlap over an existing overlap, which creates four layers.

Thermoforming

> ⚠ **CAUTION**
>
> Film series 3630 and 3730 may emit vapors during the thermoforming process. Be sure to read and follow the information contained in 3M Instruction Bulletin 5.16 before thermoforming.

> ⚠ **CAUTION**
>
> Channel Letter Faces
>
> When using film series 3630 or 3730 on rigid plastic channel letter faces, avoid contact with the adhesive used to attach the trim cap edge. These adhesives attack film and cause curling, lifting, and premature failure of the film.

Spray Painting

Film series 3630 and 3730 can be spray painted with Lacryl™ diffuser paints with good performance. However, the performance or application of the paints is not warranted.

Cutting

See 3M Instruction Bulletin 4.1 for Sheeting, Scoring and Film Cutting details.

Graphic Protection

Graphic protection may improve the appearance, performance and durability of the graphic. Click on the graphic protection options listed in Product Bulletin or see the 3M Graphics Market Product Catalog, for more information.

> ⓘ **IMPORTANT NOTE**
>
> During installation, scratches may occur on films without graphic protection.

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 3M Instruction Bulletin 4.3 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 3M Instruction Bulletin 4.3 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
- 3M Instruction Bulletin 4.60. 3M™ Envision™ Translucent and Diffuser Films. Guidelines for Backlit Signs.
- 3M Instruction Bulletin 5.1 Select and Prepare Substrates for Graphic Application
- 3M Instruction Bulletin 5.30 Application of 3M Pressure-Sensitive Films to 3M Flexible Substrates
- 3M Instruction Bulletin 5.4. Application, Fleet Trucks.
- 3M Instruction Bulletin 5.5 Application, General Procedures for Interior and Exterior Dry Application
    - For roll application, the dry method is acceptable.
- 3M Instruction Bulletin 5.7 Application, Wet Method for Translucent, Inkjet, Screen Printed and Cut Graphics
    - For applications by hand, the detergent and water application method is recommended for this pressure-sensitive film. Dry application by hand may leave dark streaks or bubbles that could be visible in transmitted light.
- 3M Instruction Bulletin 6.5 Storage, Handling, Maintenance, and Removal of Films and Sheetings

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 3M Instruction Bulletin 6.1 for details.

Removal

This film uses a permanent adhesive. This film is not easily or cleanly removable. See 3M Instruction Bulletin 6.5 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 100 °F (4° to 38 °C)
- Out of sunlight
- Clean, dry area
- Original container
- Bring the film to room temperature before use

Shipping Finished Graphics

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

Health and Safety

⚠ **CAUTION**

When handling any chemical products, read the manufacturer's 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 manufacturer's instructions for safe operation.

Bulletin Change Summary

For the most current 3M Technical Information available to successfully use this product, please view this Bulletin electronically and click on the blue underlined links to view the relevant documents. Please read the entire Bulletin thoroughly.

Release L MARCH-2017:

- Updated Colors, see "Colors" on page 3.
- Updated Table C on page 9 to add new Gain calculations.

Release K MAY-2016:

- Added "Exposure Types" on page 6.
- Updated "Warranty Period for Finished Graphics" on page 7.

Release J NOVEMBER-2015:

- Updated "Shelf Life, Storage and Shipping" on page 12.

Release I AUGUST-2015:

- Updated to new format. Please read the entire Bulletin thoroughly.

3M