Series 7725

Product Description

• 2-mil cast vinyl film

Product Features

- Pressure-sensitive non-removable adhesive
- Same color on both sides
- Transparent, synthetic liner resists moisture absorption and static buildup
- Lays flat for easier assembly of multi-color graphics
- Excellent cutting and weeding, as small as 0.25 in. (0.64 cm)
- Ideal for electronically cut or screen printed graphics, or for use in narrow width thermal transfer printing systems
- Expected performance life of eight years (unwarranted period for unprinted film with no graphic protection, applied to a flat, vertical, outdoor surface)

Recommended Types of Graphics and End Uses

- Prespaced and electronically cut graphics
- Commercial and industrial graphic applications, including emblems, vehicle graphics, labels, striping, general signage, and two-way window markings
- Thermal transfer printed graphics

Recommended Compatible Products

Visit $\underline{\mathsf{3Mgraphics.com/warranties}}$ for a complete list of compatible products approved by 3M for use with the base film covered in this bulletin and used for the creation of graphics that may be eligible for the $3M^{\mathsf{TM}}$ MCS $^{\mathsf{TM}}$ Warranty or 3M Performance Guarantee.

Screen Printing Inks for 3M™ MCS™ Warranty

- 3M™ Screen Printing Ink Series 1900 (Solvent), line color and four color
- 3M™ Screen Printing UV Ink Series 9800, line color and four color

Graphic Protection

- 3M™ Scotchcal™ Gloss Overlaminate 8518
- 3M™ Scotchcal™ Luster Overlaminate 8519
- 3M™ Scotchcal™ Matte Overlaminate 8520
- 3M™ Scotchcal™ Gloss Overlaminate 8528
- 3M™ Envision™ Gloss Wrap Overlaminate 8548G
- 3M™ Envision™ Luster Wrap Overlaminate 8549L
- 3M™ Envision™ Matte Wrap Overlaminate 8550M
- 3M™ Anti-Graffiti Gloss Overlaminate 8588G
- 3M™ Anti-Graffiti Matte Overlaminate 8590M

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- 3M™ Screen Print Gloss Clear 1920DR
- 3M™ Screen Print UV Gloss Clear 9800CL
- 3M™ Screen Print Matte Clear 9730i
- 3M™ Screen Print UV Gloss Clear 9740i

Other Products

- 3M™ Edge Sealer 3950
- 3M™ Edge Sealer Tape 8914



3M Graphics Warranties
Technical Information Selector
Safety Data Sheets (SDS)
Flammability
Videos

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



3M™ Scotchcal™ ElectroCut™ Graphic Film

Certificate of 3M™ MCS™ Warranty

Graphic manufacturers who produce digitally printed graphics made with all branded 3M Graphics products, including 3M ink purchased through a qualified 3M distributor or 3M printing partner, may register to be recognized with a Certificate of 3M™ MCS™ Warranty. Only graphic manufacturers having a current Certificate of 3M™ MCS™ Warranty are eligible to extend this warranty to their customers.

NOTE: For non-digitally printed finished graphics, check your eligibility for the 3M™ MCS™ Warranty by viewing the warranty period found within this product bulletin or by using the warranty selector at www.3mgraphics.com/warranties.

Characteristics

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

Physical Characteristics

Characteristic	Value		
Material	Vinyl		
Film Color	Opaque, see Colors		
Thickness	Without adhesive: 2 mil (0.05 mm) With adhesive: 2.5 mils to 3.5 mils (0.063 mm to 0.09 mm)		
Adhesive	Pressure sensitive		
Adhesive Color	Clear		
Liner	Transparent, synthetic		
Typical Adhesion 24 Hours After Application	ABS: 4 lbs/in. (0.7 kg/cm) Acrylic: 4 lbs/in. (0.7 kg/cm) Acrylic enamel: 4 lbs/in. (0.7 kg/cm) Fruehauf pre-painted panels: 4 lbs/in. (0.7 kg/cm) Polycarbonate: 4 lbs/in. (0.7 kg/cm) Urethane paints: 4 lbs/in. (0.7 kg/cm) Aluminum, alodine: 8 lbs/in. (1.4 kg/cm) Chrome: 5 lbs/in. (0.9 kg/cm) Polypropylene: 3 lbs/in. (0.5 kg/cm)		
Tensile Strength	5 lbs/in. at 73°F (0.9 kg/cm at 23°C)		
Chemical Resistance	Resists mild alkalis, mild acids, and salt. Excellent resistance to water (does not include immersion)		
Flammability	View the ASTM E84 test report <u>here</u> , or go to the online catalog at 3Mgraphics.com. For all available test reports call 1-800-328-3908.		

Application Characteristics

Characteristic	Value	
Finished Graphic Application Recommendation	Surface type: Flat, with and without rivets, simple curves, moderate compound curves Substrate type: Smooth, rigid vehicle materials such as glass, aluminum, paint, and ABS molding Application method: Wet or dry Application temperature (air and substrate): Flat surfaces with and without rivets: 50°F to 100°F (10°C to 38°C)	
Temperature Range After Application	-40°F to +225°F (-40°C to +107°C) (Though not for extended periods of time at the extremes.)	
Graphic Removal	Not removable	

Colors

Solid Colors			Metallic and Transparent
10 White	53 Cardinal Red	101 Nimbus Gray	120 Satin Aluminum
11 Pearl Gray	54 Light Orange	103 Magenta	131 Satin Gold
12 Black	56 Dark Green	105 Harvest Gold	201 Slate
13 Tomato Red	57 Olympic Blue	107 Light Blue	211 Charcoal
14 Bright Orange	58 Burgundy	117 Persian Blue	217 Dark Blue
15 Bright Yellow	59 Putty	121 Light Gray	227 Bright Blue
16 Khaki Green	61 Mid Gray	127 Boat Blue	229 Copper
17 Vivid Blue	63 Geranium	136 Lime Green	239 Chocolate Brown
19 Deep Mahogany Brown	64 Apricot	151 Traffic Gray	241 Gold
20 Matte White	65 Light Lemon Yellow	177 Shadow Blue	243 Steampunk Red
22 Matte Black	66 Forest Green	186 Bright Green	247 Petroleum Blue
23 Deep Red	69 Duranodic	187 Wedgewood Blue	249 Champagne
24 Terra Cotta	74 Red Orange	196 Apple Green	114 Transparent
25 Sunflower	77 Peacock Blue	197 Light Navy	
27 Indigo (Navy)	78 Plum	263 Perfect Match Red	
29 Russet Brown	81 Stone Gray	273 Process Magenta	
31 Medium Gray	86 Robin Egg Blue	276 Bottle Green	
37 Sapphire Blue	89 Sandstone	293 Atomic Red	
38 Royal Purple	90 Antique White	307 Dark Aqua	
39 Tan	91 Dove Gray	357 Bermuda Blue	
41 Dark Gray	93 Imperial Red	397 Dark Blue	
46 Kelly Green	96 Teal		
47 Intense Blue	97 Soft Blue		
48 Purple	98 Dark Violet		
49 Beige	99 Fawn		

Factors Affecting Graphic Performance Life

The actual performance life of a graphic is affected by:

- The combination of graphic 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 and maintenance methods

Graphics Manufacturing



CAUTION

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

3M™ Scotchcal™ ElectroCut™ Graphic Film

Screen Printing

Formulations and processing conditions can affect ink durability. Users should refer to their ink's product and instruction bulletins for limitations and proper usage.

Thermal Transfer Printing

Formulations and processing conditions can affect ink durability. Users should refer to their ink's product and instruction bulletins for limitations and proper usage.

This film can be imaged with narrow width thermal transfer printing systems. Refer to the equipment manufacturer's literature for details.

Cutting

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

Weeding

Excess film should be weeded (removed) as soon after cutting as is practical. This minimizes the effect of possible adhesive flow 24 or more hours after cutting.

Graphic Protection

Graphic protection may improve the appearance, performance, and durability of the graphic. Click on the graphic protection options listed in this product bulletin or see the <u>3M Graphics Materials Product Catalog</u> 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 <u>3M Instruction Bulletin AT-1</u> to determine what application tape is recommended for your film or finished graphic.

Premasking Tape

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

Prespacing Tape

Prespacing tape holds cut and weeded letters or graphics in place during application and after removal of 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 users may need to successfully apply a graphic.

- 3M Instruction Bulletin 2.1 Design of Graphics
- 3M Instruction Bulletin 3.11 Screen Printing, 3M™ Screen Printing Ink Series 1900 four color and Screen Print Clear VI0402
- 3M Instruction Bulletin 3.12 Screen Printing, 3M™ Screen Printing Ink Series 1900 line color and Screen Print Clear VI0402
- 3M Instruction Bulletin 3.20 Screen Printing, with 3M™ Screen Printing UV Ink Series 9800 For Line Color Screen Printing Only
- 3M Instruction Bulletin 3.21 Screen Printing, With 3M™ Screen Printing UV Ink Series 9800 For 4-Color Screen Printing Only
- 3M Instruction Bulletin 5.4 Application, Fleet Trucks
- <u>3M Instruction Bulletin 5.7</u> Application, Wet Method for Translucent, Inkjet, Screen Printed and Cut Graphics

Stretchability

3M™ Tape Primer 94 and Adhesion Promoter 111

3M recommends using primer where the film will be stretched, particularly on the edges of the film, to maximize a graphic's bond to its substrate.

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 3M Instruction Bulletin 6.5 for details.

Removal

Not removable. 3M makes no claims as to the speed of removal. This product may not remove similarly to other products in the same category. See 3M Instruction Bulletin 6.5 for details.

Shelf Life, Storage, and Shipping

Shelf Life

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

Processing the film changes its shelf life to one year from the processing date, but no later than three years from the manufacturing date.

Storage Conditions

- 40°F to 100°F (4°C 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 a 6 in. (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 manufacturers' container labels and the safety data sheets (SDS) for important health, safety, and environmental information. To obtain SDS for 3M products go to 3M.com/SDS. To request SDS by mail, or in case of an urgent situation, call 1-800-364-3577 or 1-651-737-6501.

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

3M™ Scotchcal™ ElectroCut™ Graphic Film

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 the film was purchased. Information found at 3M.com/graphicswarranties includes:

- 3M Graphics Warranties Bulletin
 - This bulletin contains information on limitations, 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.

Technical Information

The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment, reviewing all applicable regulations and standards, and reviewing the product label and use instructions. Failure to properly evaluate, select, and use a 3M product in accordance with instructions or to meet all applicable safety regulations may result in injury, sickness, death, and/or harm to property.

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