3M[™] Scotchcal[™] Overlaminates Product Bulletin 8518, 8519, 8520, 8914, 8915, 8528 Revision D, February 2022

8518 Gloss Overlaminate 8519 Luster Overlaminate 8520 Matte Overlaminate 8914 Optically Clear Overlaminate 8915 Ultra-Matte Overlaminate 8528 Gloss Overlaminate

Quick Links

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

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

Product Description

- 8518, 8519, 8520: resists fuel vapors, highly conformable
- 8518: provides a wet paint look
- 8914: optically clear, conformable, and primarily used to protect perforated window graphic films and prevent moisture and contaminants from collecting in the film's perforations
- 8915: Ultra-matte, reduces glare
- 8528: Excellent UV protection, longer term vertical durability, horizontal warranty
- 8518, 8519, 8520, 8914, 8915: Expected performance life of eight years (unwarranted period applied to a flat, vertical, outdoor surfaces)
- 8528: Expected performance life of nine years (unwarranted period applied to a flat, vertical, outdoor surfaces)

Recommended Types of Graphics and End Uses

- 8518, 8519, 8520: Fleet/vehicle, vehicle wraps, watercraft, transit, labels, thermoformable graphics, smooth walls
- 8518, 8914: Windows and glass
- 8915: Fleet/vehicle, vehicle wraps, watercraft, transit, signage, smooth walls
- 8528: Fleet/vehicle, vehicle wraps, transit, smooth walls, windows, and glass
- Floor graphics (8520 only)

(i) IMPORTANT NOTE

8520 has been tested according to the UL410 specification, and is certified to be slip-resistant for use in floor graphics.



Characteristics

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

Performance Characteristics

| Characteristic | Value |
|-----------------------------|--|
| Material | Cast vinyl |
| Thickness | 2 mils |
| Gloss | 8518, 8914, 8528: Gloss 8519: Luster 8520: Matte 8915: Ultra-matte |
| Liner | 8518, 8914, 8528: Polyester 8519, 8520, 8915: Kraft paper |
| Lamination Temperature | 60°F to +100°F (15°C to +38°C) |
| In Use Temperature Range | -65°F to +200°F (-54°C to +93°C) |
| Chemical Resistance | Resists mild alkalis, mild acids, and salt Excellent resistance to water (<i>does not include immersion</i>) Resists occasional fuel spills |
| Flammability | ASTM E84 reports: <u>8518</u> , <u>8519</u> , <u>8520</u> , and <u>8528</u> , or go to the online product catalog at <u>3Mgraphics.com</u> . For all other test reports call 1-800-328-3908. |

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



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

Completely Dry Graphics



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 Graphics warranty.

See the ink's 3M product and instruction bulletins for more details.

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 properly manufacture a graphic.

- 3M Instruction Bulletin 4.22 Lamination Basics for Inkjet Printed Graphics
- 3M Instruction Bulletin 5.7 Application, Wet Method for Translucent, Inkjet, Screen Printed and Cut Graphics

Maintenance and Cleaning

Use a cleaner designed for high-guality 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.

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



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 reguest 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.

Air Quality Regulations

State volatile organic compound (VOC) regulations may prohibit the use of certain chemicals with VOCs in graphic arts coatings and printing operations. For example, the California South Coast Air Quality Management District (AQMD) prohibits the use of certain solvent-based solutions without a permit, while other California AQMDs prohibit the use of certain solutions without a permit or regulatory exemption. Users should check with their state's environmental authorities to determine whether use of this product may be restricted or prohibited.

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 <u>3M.com/graphicswarranties</u> includes:

- <u>3M Graphics Warranties Bulletin</u>
 - 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.
- <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.

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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