Products

This Bulletin provides an overview of all 3M graphic protection options.
All product-specific information for standard overlaminates is included in this Bulletin.
For a list of recommended base film and overlaminate solutions refer to the Graphics Solutions product catalogue brochure.

Standard Overlaminates

Cast

3M™ Scotchcal™ Luster Overlaminate 3619

3M™ Scotchcal™ Matte Overlaminate 3620

3M™ Scotchcal™ Gloss Overlaminate 3640GPS

3M™ Scotchcal™ Matte Overlaminate 3642GPS

3M™ Scotchcal™ Gloss Overlaminate 3658G

3M™ Scotchcal™ Matte Overlaminate 3660M

3M™ Scotchcal™ Gloss Overlaminate 3669D

3M™ Scotchcal™ Gloss Overlaminate 8508

3M™ Scotchcal™ Gloss Overlaminate 8580

3M™ Scotchcal™ Matte Overlaminate 8580M

3M™ Scotchcal™ Gloss Overlaminate 8518

3M™ Scotchcal™ Matte Overlaminate 8520

3M™ Scotchcal™ Gloss Overlaminate 8528

3M™ Scotchcal™ Ultra-Matte Overlaminate 8915

3M™ Scotchcal™ Graphic Film IJ70-114

[3M™ Wrap Overlaminate Series 8900](#)

(please see product-specific information for Series 8900 in separate product bulletin

Calendered (polymeric)

3M™ Scotchcal™ Gloss Overlaminate 8018G

3M™ Scotchcal™ Matte Overlaminate 8020M

3M™ Scotchcal™ Gloss Overlaminate 8038G

3M™ Scotchcal™ Matte Overlaminate 8040M

3M™ Scotchcal™ Matte Overlaminate 8510M

Calendered (monomeric)

3M™ Scotchcal™ Gloss Overlaminate 8008G

3M™ Scotchcal™ Matte Overlaminate 8010M

Non-PVC polymer

3M™ Envision™ Gloss Wrap Overlaminate 8548G

3M™ Envision™ Matte Wrap Overlaminate 8550M

3M™ Envision™ Luster Wrap Overlaminate 8549L

3M™ Envision™ Gloss Overlaminate 8048G

3M™ Envision™ Matte Overlaminate 8050M

Specialty Overlaminates
Graphic for Floors/Pavement
3M™ Scotchcal™ Luster Overlaminate 3645
3M™ Scotchcal™ Matte Overlaminate 3647
3M™ Scotchcal™ Matte Overlaminate 3649

Perforated Window Graphic Film
3M™ Scotchcal™ Optically Clear Overlaminate 8914i

Window Decoration
3M™ Scotchcal™ Clear View Graphic Film 8150
3M™ Scotchcal™ Clear View Graphic Film IJ8150

Anti-Graffiti and Anti-Scratch
Scotchgard™ Graphic and Surface Protection Film 8991
Scotchgard™ Graphic and Surface Protection Film 8993
Scotchgard™ Removable Graphic and Surface Protection Film 8991R
Scotchgard™ Graphic and Surface Protection Film 8995-124
3M™ Anti-Graffiti Wrap Gloss Overlaminate 8588G
3M™ Anti-Graffiti Wrap Matte Overlaminate 8590M
(please see product-specific information for Anti-Graffiti Wrap Overlaminate in separate product bulletin)

Standard Clears
Solvent-based
3M™ Screen Print Dirt Resistant Gloss Clear 1920DR
3M™ Screen Print Matte Clear 1930

UV-based
3M™ Screen Print UV Gloss Clear 9800CL
3M™ Screen Print UV Gloss Clear 9740i
3M™ Screen Print UV Gloss Clear 9760LX
(please see product-specific information for 9760LX in separate product bulletin)

Speciality Clears
Solvent-based
3M™ Screen Print Clear 1955 ABC

Water-based
3M™ Piezo Inkjet Protective Clear 8530

Guarantee and Warranty Information
A warranted or durability period may be offered based on graphic construction. Always refer to the 3M™ MCS™ Warranty or the 3M™ Performance Guarantee information available from 3M.

Product Characteristics

These are indicative values for unprocessed products. Contact your 3M representative for a custom specification.

Product Number	Description	Material	Surface Finish	Thickness	Adhesive Type	Liner	Outdoor Durability*
IJ70-114	flexible and conformable	cast vinyl	glossy	50 µm (0.05 mm)	solvent acrylic pressure sensitive	Polyethylene coated paper	6 years
3619	flexible, conformable, more durable	cast vinyl	glossy	50 µm (0.05 mm)	solvent acrylic pressure sensitive	Kraft paper	7 years
3620	matte version of 3619		matte				
3640GPS	high protection from UV fading, dirt, graffiti, easy to clean; thermoformable on plastic substrates	cast PVDF	glossy	50 µm (0.05 mm)	solvent acrylic pressure sensitive	Kraft paper	12 years
3642GPS	matte version of 3640GPS		matte				
3645	for slip-, scuff- and foot traffic-resistance for floor graphics	cast vinyl	matte, structured surface	200 µm (0.2 mm)	solvent acrylic pressure sensitive	Kraft paper	interior durability 12 months
3647	use for sidewalk signs for slip-, scuff- and foot traffic-resistance	cast vinyl	matte, structured surface	500 µm (0.5 mm)	solvent acrylic pressure sensitive	Kraft paper	2 years
3649	for slip-, scuff- and foot traffic-resistance for floor graphics	calendered vinyl (monomeric)	matte, structured surface	120 µm (0.12 mm)	solvent acrylic pressure sensitive	Kraft paper	interior durability 3 months
3658G	high protection from UV fading, dirt, easy to clean; thermoformable on plastic substrates	cast vinyl	glossy	50 µm (0.05 mm)	acrylic, pressure sensitive	Kraft paper	10 years
3660M	matte version of 3658G		matte				
3669D	flexible and conformable	cast vinyl	glossy	50 µm (0.05 mm)	acrylic, pressure sensitive	Kraft paper	8 years
8008G	flexible and conformable	calendered vinyl (monomeric)	glossy	80 µm (0.08 mm)	water-based acrylic pressure sensitive	Kraft paper	3 years
8010M	matte version of 8008G		matte				
8018G	flexible and conformable	calendered vinyl (polymeric)	glossy	75 µm (0.075 mm)	water-based acrylic pressure sensitive	Kraft paper	5 years
8020M	matte version of 8018G		matte				
8038G	flexible and conformable	calendered vinyl (polymeric)	glossy	75 µm (0.075 mm)	solvent acrylic pressure sensitive	Kraft paper	7 years
8040M	matte version of 8038G		matte				
8048G	flexible and conformable	non-PVC polymer	glossy	50 µm (0.05 mm)	acrylic pressure sensitive	Kraft paper	6 years
8050M	matte version of 8048G		matte				
8150	use with film 8150 for making optical clear window decorations	cast vinyl	glossy	50 µm (0.05 mm)	solvent acrylic pressure sensitive	PET	7 years
IJ8150	use with film IJ8150 for making optical clear window decorations						
8508	flexible and conformable	cast vinyl	glossy	60 µm (0.06 mm)	solvent acrylic pressure sensitive	Kraft paper	6 years
8510M	flexible and conformable	calendered vinyl (polymeric)	matte	90 µm (0.09 mm)			
8518	flexible and conformable	cast vinyl	glossy	50 µm (0.05 mm)	solvent acrylic pressure sensitive	PET	8 years
8520	matte version of 8518		matte			Kraft paper	

3M

Product Number	Description	Material	Surface Finish	Thickness	Adhesive Type	Liner	Outdoor Durability*
8528	flexible and conformable, substrate and surface protection from UV light	cast vinyl	glossy	50 µm (0.05 mm)	solvent acrylic pressure sensitive	Kraft paper	10 years
8548G	high conformability and lifting resistance	non-PVC polymer	glossy	50 µm (0.05 mm)	polymelt pressure sensitive	PET	9 years
8550M	matte version of 8548G			matte			
8549L	high conformability and lifting resistance	non-PVC polymer	glossy	50 µm (0.05 mm)	polymelt pressure sensitive	PET	9 years
8580	high conformability and lifting resistance	cast vinyl	glossy	25 µm (0.025 mm)	solvent acrylic pressure sensitive	Kraft paper	7 years
8580M	matte version of 8580		matte				
8914i	optically clear for window graphics, conformable	cast vinyl	glossy	50 µm (0.05 mm)	solvent acrylic pressure sensitive	PET	12 months
8915	flexible and conformable, reduces glare	cast vinyl	ultra-matte	50 µm (0.05 mm)	solvent acrylic pressure sensitive	Kraft paper	8 years
Scotchgard™ 8991	substrate and surface protection from stains, abrasion, gouges, UV light, graffiti; easy to clean	extruded Polyester	high-gloss	100 µm (0.1 mm)	solvent acrylic pressure sensitive	Kraft paper	5 years
Scotchgard™ 8991R	removable version of 8991						
Scotchgard™ 8993	substrate and surface protection from graffiti; easy to clean	extruded Polyester	high-gloss	25 µm (0.025 mm)	solvent acrylic pressure sensitive	Kraft paper	5 years
Scotchgard™ 8995-124	substrate and surface protection from graffiti; easy to clean	extruded Polyester	matte	23 µm (0.023 mm)	solvent acrylic pressure sensitive	Kraft paper	interior durability 5 years

Product Number	Description	Thickness	Capacity	Outdoor durability*
Clear 1920DR	solvent-based, gloss with dirt resistance; for frequently washed vehicles	minimum 6 µm (0.006 mm)	60 m²/l	7 years
Clear 1930	solvent-based, matte			3 years
Clear 1955ABC	two component solvent-bases; for petroleum environments	minimum 6 µm (0.006 mm)	50 - 55 m²/l	5 years
Clear 8530	water-based clear, high luster gloss for piezo inkjet printed graphics; apply with liquid laminator	8 – 20 µm (0.008 – 0.02 mm)	20 m²/l	12 months
Clear 9740i	UV-cured, gloss	6 – 12 µm (0.006 – 0.012 mm)	70 – 85 m²/l	8 years
Clear 9800CL	UV-cured, gloss; for petroleum environments if staining is not a concern	10 – 15 µm (0.01 – 0.015 mm)	70 – 85 m²/l	6 years

* see also section Durability
Since graphic durability is largely determined by the climate, the durability stated is based on average middle European exposure conditions. It might vary according to the geographical location of the application.
For further information refer to the section Additional Information at the end of the product bulletin.
The values above are the results of illustrative lab test measurements and shall not be considered as a commitment from 3M.

Storage

Shelf life

2 years from the date on the original box. Up to 2 years unprocessed, or process within 1 year and apply within 1 year of processing.

Storage conditions

+4°C to +40°C, out of sunlight, original container in clean and dry area.
The shelf life as defined above remains an indicative and maximum data, subject to many external and non-controllable factors. It may never be interpreted as warranty.

Flammability

Flammability standards are different from country to country. Ask your local 3M contact for details, please.

Further information

For more details on the used terms and test methods check our caption/reference library, please.

Durability

The durabilities mentioned in the table below are the results of illustrative lab tests. The values show the best performance expected from these products, provided that the film will be processed and applied professionally according to 3M's recommendations. The durability statements do not constitute warranties of quality, life and characteristics.

The durability of products is also influenced by:

- the type of substrate and thorough preparation of the surface (with 3M™ Surface Preparation System)
- application procedures
- environmental factors
- the method and the frequency of cleaning

Notice!

The durability of a graphic construction follows from the component with the lowest statement and cannot be extended by use of a longer lasting overlaminate.

3M™ MCS™ Warranty/3M™ Performance Guarantee

In addition, 3M provides a guarantee/warranty on a finished applied graphic within the framework of 3M™ Performance Guarantee and/or 3M™ MCS™ warranty programs.
For detailed graphic construction and application options along with specific Warranty periods, please see the Warranty matrices and Warranty information on 3M Graphic Solutions/Warranties.
Visit www.3mgraphics.com for getting more details about 3M's comprehensive graphic solutions.

Usage Details

Please visit the website of your country www.3m.co.uk for more information on specific usage of 3M Inkjet Printing Materials for Solvent, UV and Latex Printing.

Overlaminates

All products

Except as noted otherwise:

- for use on 3M graphic film surfaces only.
- overlaminates have to be applied with the cold roll method.
- moderate heated rollers (40°C maximum!) might be used for UV printed graphics for better appearance direct after lamination.
- minimize web tension of overlaminate to avoid stretching of product.

Note: Both heat and web tension can cause the overlaminate or graphic construction to curl!

IJ70-114

Can be used as printable base film (see product bulletin of this product series).

3645

Provides a skid resistant walking surface for floor graphics. Anti-slip properties have been tested according to DIN 51130 and are specified for slip resistance assessment group R9/V.

3647

Provides a skid resistant walking surface for floor graphics. Anti-slip properties have been tested according to DIN 51130 and are specified for slip resistance assessment group R10/V.

3649

Provides a skid resistant walking surface for floor graphics. Anti-slip properties have been tested according to DIN 51130 and are specified for slip resistance assessment group R9/V.

8150

IJ8150

Can be used as printable base film (see product bulletin of this product series).

8508

8510M

Lamination temperature: 10 °C to 32 °C. Service Temperature range (after application): -54°C to +93°C (not for extended periods of time at the extremes). Min. application temperature: +10°C

8548G

8549L

8550M

Non-PVC laminate, required for horizontal applications with 3M™ Envision™ Print Wrap Film LX480mC and 3M™ Envision™ Print Wrap Film SV480mC.

8914i

Provides optically-clear graphic protection and prevents moisture and contaminants from collecting in the base film's perforations.

Scotchgard™ 8991

Scotchgard™ 8991R

Can be used in the range of gasoline vapors and spills as long as those are not able to penetrate the edges of the film. Can be used on substrates other than graphic film! Application to aluminum, glass, PMMA, PC*, ABS, paint on flat surfaces. Service Temperature range (after application): -54°C to +107°C (not for extended periods of time at the extremes). Min. application temperature: +10°C.

Scotchgard™ 8993

Can be used in the range of gasoline vapors and spills as long as those are not able to penetrate the edges of the film. Can be used on substrates other than graphic film! Application to glass, metal, rigid plastics, paint on flat surfaces. Service Temperature range (after application): -54°C to +93°C (not for extended periods of time at the extremes). Min. application temperature: +10°C.

Scotchgard™ 8995-124

Can be used on substrates other than graphic film! Application to aluminum, glass, PMMA, PC*, ABS, paint on flat surfaces.

* Might require drying with heat before use.

Clears

All products

- For use on graphic film surfaces only
- Additional important information available at named product bulletins below

Clear 1920DR

Clear 1930

3M™ Screen Printing Ink Series 1900

Clear 1955ABC

3M™ Screen Print Clear 1955 ABC

Clear 8530

3M™ Piezo Inkjet Protective Clear 8530

Clear 9740i

3M™ Screen Print Gloss Clear 9740i

Clear 9800CL

3M™ Screen Printing UV Ink Series 9800

Limited Remedy

Unsuitable End Uses

3M recommended product end uses are listed in each 3M graphics product bulletin. End uses not listed in the applicable 3M Graphics Product Bulletins are typically not eligible for 3M Graphics Warranties. For non-recommended and/or non-warranted end uses or applications, users must test and approve the end uses or applications, assume any associated risks, and acknowledge that 3M has no liability for such end uses or applications. Please contact your 3M representative with any questions about graphic applications, end uses, and warranties.

Limitations of Liability

All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.
3M Commercial Solutions products are not tested against automotive manufacturer specifications!

3M specifically does not recommend or warrant the following uses, but please contact us to discuss your needs to recommend other products.

Overlaminates

All Overlaminates

Except as noted otherwise in this section or section Usage Details:
- Not for applications to substrates other than graphic films.
- Not for applications to substrate surface shapes other than specified in this section or recommended in the product bulletin of the base film used for graphic construction.
- Not for graphics subjected to gasoline vapors or spills at gas pumps, automobile fuel-tank ports, or top-feeding petroleum tankers.
- Do not print on overlaminate.
- 3M Commercial Graphics Division products are not tested against automotive manufacturer specifications!

Non-vertical applications will have a significant decrease in durability!

3640GPS
3642GPS

Not for application to other 3M brand GPS films, Panagraphics III substrate, FS-1 flexible substrate or for graphics subjected to intentional or accidental abrasion.

Not recommended for protection of fleet graphics.

3645

Not for exterior usage.

Use with recommended base films only.

3647

No exposure to vehicle traffic and heavy equipment.

Use with recommended base films only.

3649

Not for exterior usage.

Use with recommended base films only.

8150

Use with recommended base films only. Finished graphics are pressure sensitive. The optical transparency can be impacted by pressure marks in the adhesive. Processed material must be placed or stored on mandrel or with core support. The weight of the roll placed on the tangent leads to repetitive pressure points which remain visible.

8914i

Do not use application tape for any graphics made with this overlaminate.

Scotchgard™ 8991
Scotchgard™ 8991R

Not for use for other than flat surfaces.

Not for cut film applications, flexible substrates, gypsum wallboard, poor paint adhesion, porous or unsealed surfaces.

Not for vandalism or excessive product misuse that damages the substrate.

Scotchgard™ 8993

Not for use for other than flat surfaces.

Clears

All Clears

Limitations of End Uses like described in the corresponding product bulletin (see usage details).

Converting Information

Inkjet Printing

A too high total physical ink amount on the film results in media characteristic changes, inadequate drying, overlaminate lifting, and/or poor graphic performance. The maximum recommended total ink coverage for this film is 270%.

See individual ink bulletins for details, please.

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.

Special Instructions for HP Latex 831/871 and HP 881/891

Application Tape

Application tape may be used to add stiffness to a graphic for easier application, hold cut graphics together while applying, or to protect graphics from scratching and other damage during application. However, many graphics with an overlaminate do not require an application tape.

See Bulletin Application Tape Recommendations for information about selection and use of suitable application tapes, please.

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.)

Refer to Instruction Bulletin 6.5 'storage, handling, maintenance and removal of films and sheetings', for general maintenance and cleaning information.

Shipping Finished Graphics

Flat, or rolled printed side out on 130 mm (5") or larger core. These methods help to prevent the liner from wrinkling or popping off the film.

Health and Safety

When handling any chemical products, read the manufacturer's container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information.

Follow the link to obtain SDS sheets for 3M products on 3M.com/SDS.

Follow the link to obtain information about substances of very high concern (SVHC).

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

3M