



Graphic Protection Options

Overlaminates and clears

Product Bulletin

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 laminate and clear coat solutions refer to the Graphics Solutions product catalogue brochure.

NB: Product ranges vary by region. Please contact your local representative for confirmation of the available products in your region.

Standard Overlaminates	cast	3M™ Scotchcal™ Luster Overlamine 3619	
		3M™ Scotchcal™ Matte Overlamine 3620	
		3M™ Scotchcal™ Gloss Overlamine 3640GPS	
		3M™ Scotchcal™ Matte Overlamine 3642GPS	
		3M™ Scotchcal™ Gloss Overlamine 8580	
		3M™ Scotchcal™ Matte Overlamine 8580M	
		3M™ Scotchcal™ Gloss Overlamine 8518	
		3M™ Scotchcal™ Luster Overlamine 8519	
		3M™ Scotchcal™ Matte Overlamine 8520	
		3M™ Scotchcal™ Ultra-Matte Overlamine 8915	
		3M™ Scotchcal™ Graphic Film IJ70-114	
		non-PVC polymer	3M™ Scotchcal™ Luster Overlamine 8908
			3M™ Scotchcal™ Matte Overlamine 8909
3M™ Envision™ Gloss Wrap Overlamine 8548G			
3M™ Envision™ Gloss Luster Overlamine 8549L			
3M™ Envision™ Gloss Overlamine 8048G			
calendered (polymeric)	3M™ Scotchcal™ Gloss Overlamine 8018G		
	3M™ Scotchcal™ Matte Overlamine 8020M		
	3M™ Scotchcal™ Gloss Overlamine 8038G		
	3M™ Scotchcal™ Matte Overlamine 8040M		
calendered (monomeric)	3M™ Scotchcal™ Gloss Overlamine 8008G		
	3M™ Scotchcal™ Matte Overlamine 8010M		
Specialty Overlaminates	Graphic for Floors/Pavement	3M™ Scotchcal™ Luster Overlamine 3645	
		3M™ Scotchcal™ Matte Overlamine 3647	
		3M™ Scotchcal™ Matte Overlamine 3649	

	Perforated Window Graphic Film	3M™ Scotchcal™ Optically Clear Overlamine 8914i
	Window Decoration	3M™ Scotchcal™ Clear View Graphic Film 8150
	Wall Application	3M™ Scotchcal™ Luster Overlamine 8524
	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
Standard Clear Coats	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
Specialty Clear Coats	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. See section *Additional Information* at the end of this bulletin for details.

Product Characteristics

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

Product Number	Description	Material	Surface Finish	Thickness	Adhesive Type	Outdoor Durability <small>(See also paragraph entitled Durability)</small>
IJ70-114	flexible and conformable	cast vinyl	gloss	50 µm (0.05 mm)	solvent acrylic pressure sensitive	6 years
3619	flexible, conformable, more durable	cast vinyl	gloss	50 µm (0.05 mm)	solvent acrylic pressure sensitive	8 years
3620	matte version of 3619		matte			8 years
3640GPS	highest protection from UV fading, dirt, graffiti, easy clean; thermoformable on plastic substrates	cast PVDF	gloss	50 µm (0.05 mm)	solvent acrylic pressure sensitive	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	interior durability 12 months

Product Number	Description	Material	Surface Finish	Thickness	Adhesive Type	Outdoor Durability (See also paragraph entitled Durability)
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	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	interior durability 3 months
8008G	flexible and conformable	calendered vinyl (monomeric)	gloss	80 µm (0.08 mm)	waterbased acrylic pressure sensitive	3 years
8010M	matte version of 8008G		matte			
8018G	flexible and conformable	calendered vinyl (polymeric)	gloss	75 µm (0.075 mm)	waterbased acrylic pressure sensitive	5 years
8020M	matte version of 8018G		matte			
8038G	flexible and conformable	calendered vinyl (polymeric)	gloss	75 µm (0.075 mm)	solvent acrylic pressure sensitive	7 years
8040M	matte version of 8038G		matte			
8048G	flexible and conformable	non-PVC polymer	Gloss	50 µm (0.05 mm)	acrylic pressure sensitive	5 years
8150	use with film 8150 for making optical clear window decorations	cast vinyl	gloss	50 µm (0.05 mm)	solvent acrylic pressure sensitive	7 years
8518	flexible and conformable	cast vinyl	gloss	50 µm (0.05 mm)	solvent acrylic pressure sensitive	8 years
8519	flexible and conformable	cast vinyl	gloss	50 µm (0.05 mm)	solvent acrylic pressure sensitive	8 years
8520	matte version of 8519		matte			
8524	use with film IJ8624 for textured surfaces; conformable with heat	Plastic	gloss	50 µm (0.05 mm)	solvent acrylic pressure sensitive	7 years
8548G	unrivaled conformability and lifting resistance	non-PVC polymer	gloss	50 µm (0.05 mm)	polymelt pressure sensitive	9 years
8549L	unrivaled conformability and lifting resistance	non-PVC polymer	lustre	50 µm (0.05 mm)	polymelt pressure sensitive	9 years

Product Number	Description	Material	Surface Finish	Thickness	Adhesive Type	Outdoor Durability (See also paragraph entitled Durability)
8580	unrivalled conformability and lifting resistance	cast vinyl	gloss	25 µm (0.025 mm)	solvent acrylic pressure sensitive	7 years
8580M	matte version of 8580	cast vinyl	gloss	25 µm (0.025 mm)	solvent acrylic pressure sensitive	7 years
8908	flexible and conformable	Polyolefin	gloss	65 µm (0.065 mm)	solvent acrylic pressure sensitive	5 years
8909	matte version of 8908		matte			
8914i	optically clear for window graphics, conformable	cast vinyl	gloss	50 µm (0.05 mm)	solvent acrylic pressure sensitive	12 months
8915	flexible and conformable, reduces glare	cast vinyl	ultra-matte	50 µm (0.05 mm)	solvent acrylic pressure sensitive	8 years
Scotchgard™ 8991	superior 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	5 years
Scotchgard™ 8991R	removable version of 8991					
Scotchgard™ 8993	superior substrate and surface protection from graffiti; easy to clean	extruded Polyester	high-gloss	25 µm (0.025 mm)	solvent acrylic pressure sensitive	5 years
Scotchgard™ 8995-124	superior substrate and surface protection from graffiti; easy to clean	extruded Polyester	matte	23 µm (0.023 mm)	solvent acrylic pressure sensitive	interior durability 5 years
Clear 1920DR	solvent-based, gloss with dirt resistance; ideal for frequently washed vehicles			minimum 6 µm (0.006 mm)	60 m²/l	5 years
Clear 1930	solvent-based, matte					3 years
Clear 1955ABC	two component solvent-bases; suitable 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	5 years
Clear 9800CL	UV-cured, gloss; suitable for petroleum environments if staining is not a concern			10 – 15 µm (0.01 – 0.015 mm)	70 – 85 m²/l	6 years

Durability

Since graphic durability is largely determined by the climate, the durability stated is based on average exposure conditions in Central and Northern Europe (Zone 1). However, this may vary according to the geographical location of the application, check with your local representative for further information..

For further information refer to the section Complementary Information at the end of this bulletin.

Notice The durability of a graphic construction, i.e. film, ink and overlamine is dictated by the durability of the component with the shortest warranty.

Shelf life The shelf life for unprocessed film is 2 years from the date of manufacture (i.e. the date marked on the original packaging). Process within 1 year of manufacture and apply within 3 months of processing.

Storage conditions (films only) Store in the original container at temperatures of +4°C to +38°C, out of sunlight, in a clean and dry area. Bring the film to room temperature before use.

Flammability Flammability standards vary from country to country. Contact you local representative for information relevant to your region.

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

Usage Details Overlaminates

Please visit our website www.3M.co.uk/graphicsolutions for more information on specific usage of 3M Inkjet Printing Materials for Solvent, UV and Latex Printing.

All products Except as noted otherwise:

- Apart from Scotchgard™ Graphic and Surface Protection Films 8991, 8993 and 8995-124, the overlaminates referenced in this bulletin are for use on 3M graphic film surfaces only.
- Overlaminates can be applied using the cold roll method
- If silvering occurs, moderate heated rollers (38°C maximum) may also be used.
- Minimise web tension of overlamine to avoid stretching of product.

Note: Both heat and web tension can cause the overlamine 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.
Skid resistance tested by European Test Method prEN1341 and 1342: Result: SRV=61 (dry surface). Note: Values SRV>35 are safe walking surfaces.

3647 Provides a skid resistant walking surface.
Skid resistance tested by European Test Method prEN1341 and 1342: Result: SRV=49 (dry surface); SRV=40 (wet surface).
Note: Values SRV>35 are safe walking surfaces.

3649 Provides a skid resistant walking surface.
Skid resistance tested by European Test Method prEN1341 and 1342: Result: SRV=67 (dry surface). Note: Values SRV>35 are safe walking surfaces.

8150 Can be used as printable base film (see product bulletin of this product

series).

8548G Non-PVC laminate, required for horizontal applications with 3M
8549L LX480Cv3 or 3M SV480Cv3

8908 8909 Cold roll method only

8914i Provides optically-clear graphic protection and prevents moisture and contaminants from collecting in the base film's perforations.

Scotchgard™
Graphic &
Surface
Protection
Films
8991
8991R

- Can resist occasional exposure to petroleum vapours and spills as long as they are not able to penetrate the edges of the film. Edge sealing can offer additional protection
- Can be used on substrates other than graphic film
- Application to aluminium, glass, PMMA, PC*, ABS, paint on flat surfaces.
- Service Temperature range: -54°C to +107°C. Min. application temperature: +10°C

Scotchgard™
Graphic &
Surface
Protection
Film 8993

- Can resist occasional exposure to petroleum vapours and spills as long as they are not able to penetrate the edges of the film. Edge sealing can offer additional protection
- Can resist be used on substrates other than graphic film!
- Application to glass, metal, rigid plastics, paint on flat surfaces.
- Service Temperature range: -54°C to +93°C. Min. application temperature: +10°C

Scotchgard™
Graphic &
Surface
Protection
Film 8995-124

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

Clear Coats

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

Clear 1920DR 3M™ Screen Printing Ink Series 1900
Clear 1930

Clear 1955ABC 3M™ Screen Print Clear 1955 ABC

Clear 8530 3M™ Piezo Inkjet Protective Clear 8530

Clear 9740i 3M™ Screen Print Gloss Clear 9740i
UV Cured ink (with EFI ink)

Clear 9800CL 3M™ Screen Printing UV Ink Series 9800

Storage Conditions for Clear Coats

0° to 27°C (32° to 80°F) maximum. Do not freeze. Warmer storage conditions will reduce the shelf life. Store clear coats:

- Out of sunlight, mercury vapor lamps, quartz-halogen lamps, or arc lamps.
- Clean dry area.
- Original container or other sealed polyethylene container that is UV opaque; do not store in glass or metal containers

Limitations of End Uses

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.
- Contact you local technical representative for guidance on application to flexible substrates
- 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 petroleum vapours or spills at fuel pumps,
- Vehicle 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
- Do not apply heat to premasked graphic constructions

3640GPS
3642GPS Not for application to other 3M brand GPS films or Panagraphics III 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.

8524 Use with recommended base films only.

8580 Not Suitable for use with Gen3 Latex Inks

8908 Not for use on films that must be stretched during application.
8909 Excessive stretching causes the overlaminite to appear white.

Scotchgard™
Graphic &
Surface
Protection Films
8991,8991R,
8993 and
8997-124 Not for use for other than flat surfaces.
Not for use on non-3M films
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.

8914i Do not use application tape for any graphics made with this overlaminate.

Clear Coats

All Clears Limitations of End Uses as described in the corresponding product bulletin (see usage details)

Application Tape

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

See Instruction 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, or soapy water solution (1:100). 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 and/or application tape from wrinkling or popping off the film.

Remarks

This bulletin provides technical information only.

Important Notice to Purchaser

A The 3M products described in this publication are covered by a 3M warranty and limitation of liability.

3M's warranty provides that if 3M finds that goods are defective in material or workmanship they will be replaced or the price refunded at 3M's option but note that 3M does not accept liability for other direct losses (except for personal injury or death) or consequential losses relating to defective products or from information supplied by 3M.

Purchasers and users of 3M products, and not 3M supplying companies, are always solely responsible for deciding on the suitability of the 3M product for their required or intended use.

Health & Safety

Refer to the package label and the Material Safety Data Sheet for health, safety, and handling information on the products referenced in this bulletin. For 3M products, if necessary, you may contact our Toxicology/Product Responsibility Department on 01344 858000.

Additional Information

Visit: www.3M.co.uk/graphicsolutions for further information for:-

- 3M MCS Warranty and 3M Performance Guarantee
- instruction bulletins
- a complete product overview

Commercial Graphics
3M United Kingdom PLC
3M Centre, Cain Road, Bracknell,
Berkshire
RG12 8HT
Tel: 01344 858000
e-mail: commgraphics.uk@mmm.com

Commercial Graphics
3M United Kingdom PLC
3M House, 28 Great Jackson Street
Manchester M15 4PA
Tel: 0845 5048843
e-mail: commgraphics.uk@mmm.com

Commercial Graphics
3M Ireland (Dublin)
The Iveagh Building
The Park, Carrickmines,
Dublin 18, Ireland
Tel: 00 353 1 280 3555
e-mail: commgraphics.uk@mmm.com

www.3M.co.uk/graphicsolutions
www.3M.co.uk/innovativefinishes
facebook.com/3MGraphicsUK
twitter.com/3MGraphicsUK