



Scotchcal™

High Gloss Overlamine 3640GPS and Matte Overlamine 3642GPS

Description

3M™ Scotchcal™ High Gloss Overlamine 3640GPS and Matte Overlamine 3642GPS provides outstanding protection from ultraviolet light, dirt and other environmental factors on long-term durability graphics. Its permanent adhesive allows application to flat surfaces without rivets.

Advantages

- Durable, dimensionally-stable, transparent, polyvinylidene fluoride (PVDF) film
- Easy to apply wet or with a roll laminator
- Provides outstanding resistance to dirt and other environmental factors, including many strong solvents
- Easy to clean
- Provides protection from ultraviolet light

Applications and Uses

Overlamine 3640GPS and 3642GPS are intended only for use with the listed Compatible Products and in the following applications. Any other application is not warranted by 3M or covered by the worldwide 3M™ MCS™ Warranty unless 3M gives its prior written approval for the application.

- Use as a clear overlamine for sign faces, awnings, and fascia, especially for dirt and graffiti protection
- For thermoforming with rigid plastic surfaces under well-controlled conditions as described in Instruction Bulletin 5.16

Limitations of Uses

The following uses and applications are specifically NOT warranted.

- Application to films or flexible substrates that are not manufactured by 3M

- The Graphic Protection System (GPS) feature of this film provides added protection from environmental factors such as dirt and many strong solvents. However, it does not provide protection against intentional or accidental abrasion.
- 3M Commercial Graphics Division products are not tested against automotive manufacturers' specifications and are, therefore, not warranted for use in fabricating graphics for automotive Original Equipment Manufacturers (OEM).

Compatible Products

- Decorated 3M™ Panaflex™ Awning and Sign Facing 945GPS
- Decorated 3M™ Panaflex™ Sign Facing 645GPS
- Flat, rigid plastic signs
- 3M™ Scotchcal™ Translucent Graphic Film Series 3630
- 3M™ Scotchcal™ Translucent Graphic Film Series 230
- 3M™ Blockout Films 3635-20b and 3635-22b

Product Line

This information is subject to change. Be sure this is the most current Product Bulletin. See 3M Related Literature at the end of this bulletin.

Characteristic	Description
Product numbers	3640-114 High gloss overlamine 3642-114 Matte overlamine
Nominal thickness (film and adhesive)	1.2 – 1.7 mil (0.03 to 0.04 mm)
Adhesive type	Permanent, pressure sensitive
Adhesive color	Clear
Liner	78 pound, white kraft paper
Application temperature range (air and substrate)	60° to 100°F (16° to 38°C)
Roll sizes	48" x 10 yards (1.2 x 9 m) 48" x 50 yards (1.2 x 46 m)

Note: For the full product names of the 3M products listed on this page, please see page 1.

Effective Performance Life

The effective performance life of Scotchcal transparent films 3640GPS and 3642GPS are based on field experience and exposure tests conducted throughout the United States. When the graphics are processed and used according to 3M recommendations, they should have the performance life shown in the charts below. The actual performance depends on the:

- correct combination of film and overlamine
- selection and preparation of the substrate
- application methods
- direction and angle of exposure
- environmental conditions
- cleaning methods

Warranted Durability

	Vertical Exposure <i>face of graphic is vertical ± 10°</i>		Non-Vertical Exposure <i>face of graphic is more than 10° from vertical</i>	
	U.S. ¹ years	S.W. ² years	U.S. ¹ years	S.W. ² years
Films 3640GPS and 3642GPS applied to:				
Film series 230	6	4	6	4
Film 3635-20b and 3635-22b, first surface	9	6	6	4
Film 3635-91, first surface unprinted	7	5	4	3
Film series 3630	9	6	6	4
Film series 3630, thermoformed	6	5	6	4
Awning and sign facing 945GPS	9	6	6	4
VT films	Contact 3M Commercial Graphics Technical Service for the warranted durability of VT films			

¹ For the warranty periods outside the United States, contact the 3M sales organization for that country.

² The United States Desert Southwest area includes Arizona, New Mexico, and the desert areas of California, Nevada, Utah, and Texas. A detailed map is available by request.

Application

Overlaminates 3640GPS and 3642GPS are applied using the wet (detergent and water) application method. See Instruction Bulletin 5.7 for details. These films may also be used in conjunction with a hand or power drive roll laminator.

- Ship the finished graphic lying flat or roll the graphic. For rolling, roll the film-side out onto a core that is 6 inches (15 cm) in diameter or larger. These methods help prevent the liner from wrinkling or popping off.

Removal


Overlaminates 3640GPS and 3642GPS are not removable.

Shelf Life, Storage and Shipping

Follow these guidelines to store and ship Overlaminates 3640GPS and 3642GPS and the processed graphics.

- The film has a shelf life of two years after receipt from 3M.
- Store the film in a clean, dry area in the original container.
- Store the film out of direct sunlight and at less than 100°F (38°C).

Health and Safety

 Caution
When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information.
To obtain MSDS sheets for 3M products:
<ul style="list-style-type: none"> • By fax, call 1-800-364-0768 in the US and Canada or 1-650-556-8417 for all other locations. • Electronically, visit us at http://www.3M.com/MSDS. • 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 manufacturers' instructions for safe operation.

3M™ Panaflex™ Products

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 information on flammability requirements, contact your local building code officials. For information on the results of flammability testing on 3M™ Panaflex™ Products from 3M Commercial Graphics Division, call 1-800-328-3908.

Warranty and Limited Remedy

The following is made in lieu of all other express or implied warranties, including any implied warranty of **merchantability** or fitness for a particular purpose: 3M™ Scotchcal™ Transparent Graphic Film 3640GPS and 3642GPS is warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this Product Bulletin. 3M will replace or refund the price of any 3M materials that do not meet this warranty within the specified time periods. See the worldwide 3M™ MCS™ Warranty bulletin, which gives the terms and limitations of the warranty.

These remedies are exclusive. In no case shall 3M be liable for any direct, indirect or consequential damages, including any labor or non-3M material charges.

3M Related Literature

Listed below is related 3M technical literature that may be of interest. You may view and print these Bulletins from our Web site at www.scotchprint.com, or order them via our Fax-on-Demand (FOD) system. Call one of these phone numbers to order the desired bulletins, and specify the FOD document number provided in the chart.

United States or Canada: 1-800-364-0768
International: 1-651-732-6506

Subject	Bulletin No.	FOD No.
Product Bulletins		
3M™ Scotchcal™ Translucent Graphic Film Series 230	230	3002
3M™ Panaflex™ Enhanced Image Sign Facing 645EI	645	4001
3M™ Panaflex™ Awning and Sign Facing 945 GPS	945	4006
3M™ Scotchcal™ Translucent Graphic Film Series 3630	3630	3009
3M Light Management Films -3M™ Blockout Films 3635-20B, 3625-22B -3M™ Day/Night Films 3635-91	3635	3010
Instruction Bulletins		
Application, substrate selection, preparation and substrate-specific application techniques	5.1	7001
Application, wet method for screen printed, thermal mass transfer and cut graphics	5.7	7007
Thermoforming	5.16	7016
Cleaning and repairing decorated awnings and sign facings	6.1	8501
Storage, handling, maintenance, removal	6.5	8505
Warranties		
Worldwide 3M™ MCS™ Warranty Packet (includes all Commercial Graphics MCS Warranties)		9503
Worldwide 3M™ MCS™ Warranty Overview-Folder		9504
Scotchprint® Graphics Warranty (includes overview)		9505
3M™ MCS™ Graphics Warranty for 3M™ Panaflex™ Awning and Sign Facings (includes overview)		9507

Scotchprint is a registered trademark of 3M in the US and other countries. 3M, MCS, Panaflex and Scotchcal are trademarks of 3M.



Commercial Graphics Division
3M Center, Building 220-6W-06
PO Box 33220
St. Paul, MN 55133-3220 USA
General Info. 1-800-374-6772
Technical Info. 1-800-328-3908
Fax 1-651-736-4233

Fax-on-Demand 1-800-364-0768 US/Canada or 1-651-732-6506 International
Fax-on-Demand document: 3011
www.scotchprint.com

3M Canada
P.O. Box 5757
London, Ontario
Canada N6A 4T1
1-800-265-1840
Fax 519-452-6245

3M México, S.A. de C.V.
Av. Santa Fe No. 55
Col. Santa Fe, Del. Alvaro Obregón
México, D.F. 01210
52-5-270-0400
Fax 52-5-270-2277

3M Puerto Rico, Inc.
Puerto Rico Industrial Park
P.O. Box 100
Carolina, PR 00986-0100
787-620-3000
Fax 787-750-3035

©3M 2002. All rights reserved.