



Scotchcal™

High Performance Graphic Films Series PN For the Professional Applicator

Product Bulletin 1-57

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GLOBAL USE

General Description

3M™ Scotchcal™ High Performance Graphic Films for the professional applicator are noted for their overall excellent performance and are used extensively throughout the automotive, recreational and marine industries. These products consist of a premium cast vinyl film coated with an OEM approved permanent pressure-sensitive adhesive. Series PN films are designed for exterior use where robustness and integrity upon repositioning, as well as where post-application is a requirement.

Product Construction



Expected Effectiveness Performance Life

Performance statements are based upon representative experience from testing throughout the United States; however, actual performance will be determined by substrate selection and preparation, exposure conditions, and maintenance of the marking. When applied, or when processed and applied according to 3M recommended procedures, an effective performance life of five years for metallics and seven years for opaques and other non-metallic substrates may be expected. This is based on exterior exposure on vertical surfaces. A significant decrease in performance may be experienced if films are exposed horizontally or near horizontally.

Colors/Appearance

Available in a wide variety of standard colors as well as custom colors. Specialty products are also available.

Physical and Chemical Characteristics

Values given are typical and are not for use as specification. If a specification is desired, a custom specification will be prepared. Any requests for a specification should be submitted through your local 3M representative.

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Adhesion

Adhesion is measured using the ASTM 1000 test.

Substrates	20 min applied	48 hrs applied
Base coat/clear coat	680 N/m	805 N/m
Paint panel (RK 8040)	(3.9 lb/in)	(4.6 lb/in)
Fiberglass	525 N/m (3.0 lb/in)	560 N/m (3.2 lb/in)
Aluminum	680 N/m (3.9 lb/in)	805 N/m (4.6 lb/in)

Chemical Resistance

Water resistance	No significant effect after 10 days.
SAE 20 motor oil resistance	No significant effect after exposure to oil and subsequent abrasion.
Gas resistance	No significant effect after exposure.
Isopropyl alcohol	No significant effect after exposure.

Physical Properties

Thickness	.076 mm (0.003 inches) nominal
Tensile strength	8619 kPa (1250 psi) average
Elongation	15% minimum

Shelf Life

It is recommended that temperatures of 13°C - 32°C (55°F - 90°F) and 44% - 55% relative humidity be maintained in the film storage location. Do not keep film in direct sunlight. Film must be used within one year from purchase.

Application

For detailed information on application of 3M™ Scotchcal™ High Performance Film Series PN, see Instruction Bulletin 2-13. For best results, apply the film to a clean substrate at temperatures between 13°C - 32°C (55°F - 90°F).

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