SNAPSHOOT
ENGINEERED FOR A SAFER TOMORROW

현장을 이해하고, 필요한 솔루션을 연결합니다.

산업안전 · 추락방지 시스템
산업용 소재 · 건축자재
제품 제안부터 공급·시공·설치·교육까지



COMPANY INFORMATION

스냅슛 (SNAPSHOOT)

ADDRESS (15431) 경기도 안산시 단원구 풍전로 37-9 트리플렉스 301동 118호
TEL 0507-1374-9229
FAX 0504-481-6749
E-MAIL bkkim@snapshoot.co.kr

TECHNICAL DOCUMENTS

인증서 · 데이터시트 · 기술자료

제품의 규격과 성능, 인증 및 적용 조건을 확인하기 위한 자료입니다.

ABOUT SNAPSHOOT

제품 공급을 넘어, 현장에 맞는 해결책으로

스냅슛은 산업현장의 작업 환경과 요구 조건을 바탕으로
적합한 제품과 시스템을 제안합니다. 현장 실사를 통해 설치 조건을 확인하고,
공급부터 시공·설치 및 사용 교육까지 필요한 과정을 함께합니다.

추락방지 시스템

안전대부착설비 · 수평·수직 라이프라인
레일 시스템 · 리지드 포스트

밀폐공간 진입·구조 솔루션

데빗암 · 삼각대 · 구조용 윈치
윈치 안전블록 · 구조장비

산업안전 보호구

전신형 안전대 · 랜야드 · 안전블록
작업 환경에 맞춘 개인보호구

산업용 소재·건축자재

산업용 테이프 · 접착제 · 기능성 소재
구조용 스크류 · 목조건축 자재

SNAPSHOOT
ENGINEERED FOR A SAFER TOMORROW

홈페이지 바로가기 →
문서 라이브러리 바로가기 →
시공사례 바로가기 →
문의하기 →

본 페이지는 스냅슛의 자료 제공 안내용 표지입니다. 첨부된 인증서 및 기술자료의 발행 주체, 인증 대상과 적용 범위는 해당 원문을 기준으로 확인해 주세요.



3M Science. Applied to Life.™

English-US

Last Revision Date: June, 2024

Supersedes: September, 2014

Technical Data Sheet

3M™ Scotchgard™ Multi-Layer Protective Film 1004

Product Description

3M™ Scotchgard™ Multi-Layer Protective Film 1004 is an optically transparent, pressure-sensitive polyester film tape designed to protect surfaces from intentional and unintentional damage caused by scratching, etching, abrasion and graffiti. A damaged film layer can be quickly and easily removed, exposing a fresh protective sheet.

Product Features

- Multi-layer construction reduces total application and removal costs versus single layer protection.
- Thick polyester film construction prevents typical scratches from affecting layers below.
- Film protects glass from chemical etching agents such as Bath Etch™ or Armour Etch™.
- Film on glass meets ASTM E162, ASTME662, FMVSS-302 and Bombardier SMP 800-C requirements.
- Durable top-coat layer prevents light scratches caused by installation, wiping, cleaning or abrasion.
- Optimized adhesive provides easy, clean removal from glass and most other surfaces.
- Optimized inter-layer adhesive provides firm, adequate adhesion yet fast and easy removal.
- High clarity construction provides glass-like appearance.

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Attribute Name	Test Method	Value
Adhesive Type		Acrylic
Backing		Polyester
Number of Layers		4
Total Thickness, 4 Layers	ASTM D3652	0.5 mm (19.5 mil)
Visible Light Transmission	ASTM D1003	90 %
Clarity	ASTM D1003	98 %
Haze	ASTM D1003	3 %

Typical Performance Characteristics

Attribute Name	Test Method	Value
Layer-to-Layer Adhesion	ASTM D3330	1.2 N/cm (11 oz/in)

Handling/Application Information

Application Examples

• 3M™ Scotchgard™ Multi-Layer Protective Film 1004MS protects glass, polycarbonate, acrylic and other surfaces from damage due to scratching, abrasion or chemical etching. Used for protecting smooth, flat surfaces such as public transportation windows and doors, modesty panels, transit kiosks, shelters, displays, mirrors and elevators.





Application Techniques

• For best results, surface must be clean and free of dirt, debris and oils and should be applied when surface temperature exceeds 50°F (10°C).
• Use of an application solution and 3M Heavy Duty Squeegee is suggested for easy positioning and squeegee application.
• Removal of film layers immediately after wet application is not recommended.
• Use of film removal tool is recommended for easy peel-back of target layer.
• For detailed Application Instructions and Tips, see 3M Technical Bulletin (70-0709-5334-7).

Application Examples

• Some acrylic and polycarbonate substrates have low surface energy coatings and/or may out-gas, leading to bubbling or adhesion issues. Test before use.
• Not approved as glazing material for windshields requiring conformance to Federal Code 49 CFR 571.205. This standard applies to passenger cars, multi- purpose passenger vehicles, trucks, buses, motorcycles, slide-in campers and pick-up covers.
• May be used outdoors for short term use (typically <1 year) with minimal change in haze, clarity, light transmission and minimal adhesive residue left on most surfaces. Some exposure conditions (e.g. direct sun facing, higher temperatures) may shorten performance.
• Blocks more than 98% of UV light that can degrade plastics and fabrics.
• Note: Removal of film layer generates static charge.

Industry Specifications

FMVSS-302
Bombardier SMP 800-C
EN 45545 test report details (ISO 5658-2)
EN 45545 test report details (ISO 5660-1, ISO 5659-2)
EN 45545 test report details (ISO 5660-1)
EN 45545 test report details (ISO 5659-2)

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

Information

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. As a result, 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 and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit www.3M.com.

ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M™ Industrial Adhesives and Tapes Division
3M Center, St. Paul, MN 55144-1000
3M.com/iatd

3M and Scotchgard are trademarks of 3M.
Bath Etch and Armour Etch are trademarks of Armour Products, Wyckoff, NJ.
©3M 2024 (6/24)