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.



Technical Data Sheet

3M™ Membrane Switch Product with Adhesive 200MP 7953MP

Additional Info | Regulatory Info/SDS

Product Description

3M™ High Performance Acrylic Adhesive 200MP is a popular choice and industry standard, for graphic attachment and general industrial joining applications. It provides outstanding adhesion to metal and high surface energy plastics. This adhesive provides some initial repositionability for placement accuracy when bonding to plastics. It also performs well after exposure to humidity and hot/cold cycles and provides the assurance the switch will perform through difficult environmental conditions and millions of actuations.

Product Features

• The High Performance Acrylic Adhesive 200MP offers excellent short-term heat resistance and will performan at temperatures up to 400ºF (204ºC)
• The 200MP adhesive provides high resistance to solvents and humidity
• The 2 mil nominal adhesive tape delivers excellent shear strength to metal surfaces
• 3M Membrane Switch products use the 200MP adhesive, which provides long lasting membrance switches
• 3M™ Double Coated Membrane Switch Spacers feature 2.0 mil adhesive layer for industry-standard, high-performance requirements.



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	Test Condition	Value
Adhesive Type			200MP Acrylic
Adhesive Carrier			Polyester Film (PET)
Adhesive Thickness		Faceside	0.04 mm (1.5 mil) [1]
Carrier Thickness			0.01 mm (0.5 mil)
Adhesive Thickness		Backside	0.04 mm (1.5 mil) [2]
Total Tape Thickness	ASTM D3652		0.09 mm (3.5 mil)
Liner Print			200MP
Primary Liner Type			58# Polycoated Kraft Paper (PCK) [3]
Secondary Liner Type			58# Polycoated Kraft Paper (PCK) [3]
Primary Liner Thickness			0.11 mm (4.2 mil)
Secondary Liner Thickness			0.11 mm (4.2 mil)

[1] Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.
[2] Backside adhesive is on the exterior of the roll, exposed when liner is removed.
[3] Inner liner is primary (stays with die-cut part); Outer liner is secondary (removed first)

Typical Performance Characteristics

Dwell Time: 72 h
Backing: 2 mil Aluminum Foil
Test Method: ASTM D3330

Attribute Name	Temperature	Substrate	Value
90° Peel Adhesion	23 °C (73 °F)	Stainless Steel	11.3 N/cm (103 oz/in) [1]
90° Peel Adhesion	70 °C (158 °F)	Stainless Steel	11.3 N/cm (103 oz/in) [1]
180° Peel Adhesion	23 °C (73 °F)	Stainless Steel	11.2 N/cm (102 oz/in) [1]
90° Peel Adhesion	23 °C (73 °F)	Aluminum	10.9 N/cm (100 oz/in) [1]
90° Peel Adhesion	23 °C (73 °F)	Polyester (PET)	6.7 N/cm (61 oz/in) [1]
90° Peel Adhesion	23 °C (73 °F)	Polycarbonate (PC)	8.5 N/cm (78 oz/in) [1]

[1] 300 mm/min (12 in/min)

Substrate: Aluminum
Temperature: 23 °C (73 °F)
Dwell Time: 72 h

Attribute Name	Test Method	Value
Overlap Shear Strength	ASTM D1002, ISO 4587	1.52 MPa (220 lb/in²) [1]

[1] Pressure was obtained via a Mechanical Press set at 138 kPa (20 psi) for 15 seconds on 25 x 25 mm (1 x 1 in) sample Crosshead speed 300 mm/min (12 in/min).

Static Shear

Substrate: Stainless Steel
Dwell Time: 72 h
Backing: 2 mil Aluminum Foil
Test Method: ASTM D3654

Temperature	Test Condition	Value
23 °C (73 °F)	1000 g	10,000 min [1]
70 °C (158 °F)	500 g	10,000 min [1]

[1] 25 x 25 mm (1 in x 1 in) sample area, test terminated after 10,000 minutes

Substrate: Stainless Steel
Temperature: 23 °C (73 °F)
Dwell Time: 72 h
Backing: 2 mil Aluminum Foil
Test Method: ASTM D3654

Attribute Name	Environmental Condition	Test Condition	Value
Short Term Temperature Resistance	204 °C (400 °F)	500 g wt for at least 60 min	60 min [1]
Long Term Temperature Resistance	149 °C (300 °F)	500 g wt for at least 10,000 min	10,000 min [1]

[1] 6.5 cm² (1 in²) Sample area

Typical Environmental Characteristics

Environmental Resistance

Humidity Resistance – High humidity has a minimal effect on adhesive performance. Bond strength shows no significant reduction after exposure for 7 days at 90°F (32°C) and 90% relative humidity.

UV Resistance – When properly applied, nameplates and decorative trim parts are not adversely affected by outdoor exposure.

Water Resistance – Immersion in water has no appreciable effect on the bond strength. After 100 hours at room temperature, the high bond strength is maintained.

Temperature Cycling Resistance – High bond strength is maintained after cycling four times through:
4 hours at 158°F (70°C)
4 hours at -20°F (-29°C)
4 hours at 73°F (22°C)

Chemical Resistance – When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids and alkalis.

Bond Build-up: The bond strength of 3M™ High Performance Acrylic Adhesive increases as a function of time and temperature as the adhesive further wets the surface and reaches maximum bond strength after 72 hours at room temperature.

Temperature/Heat Resistance: 3M™ High Performance Acrylic Adhesive on polyester carriers is usable for short periods (minutes, hours) at temperatures up to 400°F (204°C) and for intermittent longer periods (days, weeks) up to 300°F (149°C).
Lower Temperature Service Limit: -40°F (-40°C).

Electrical and Thermal Properties

Attribute Name	Test Method	Temperature	Test Condition	Value
Coefficient of Thermal Expansion	ASTM D696		First Heat (125 ~ 175 °C)	5.71 x 10^{-1} m/m/°C
Thermal Conductivity	ASTM C518	43 °C (109 °F)		1.80 x 10-1 W/m·K [1]

[1] results listed are at 43 °C (109° F)

Attribute Name	Test Method	Temperature	Value
Dissipation Factor	ASTM D150	23 °C (73 °F)	0.021
Dielectric Strength	ASTM D149		56.2 [1]
Volume Resistivity	ASTM D257	23 °C (73 °F)	3.25 x 10^{14} Ω-cm
Breakdown Voltage			5,260 V

[1] Short time method (air)

Handling/Application Information

Application Examples

• 3M™ Double Linered Adhesive Transfer Tapes are ideal for selective die cutting

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.

Recognition/Certification

TSCA: This product is defined as an article under the Toxic Substances Control Act and therefore, it is exempt from inventory listing requirements

MSDS:3M has not prepared a MSDS for this product which is not subjected to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R.1910.1200(b)(6)(v). When used under reasonable conditions or in accordance with the 3M directions for use, this product should not present a health and safety hazard. However, use or processing of the product in a manner not in accordance with the directions for use may affect its performance and present potential health and safety hazards.

UL: These products have been recognized by Underwriters Laboratories, Inc. under Ul 746C and UL 969. For more information on the UL Certification, please visit the website at http://www.3M.com/converter, select UL Recognized Materials, then select the specific product area.

Note: One of 3M's core values is to respect our social and physical environment. 3M is committed to comply with ever-changing, global, regulatory and consumer environmental, health, and safety (EHS) requirements. As a service to our customers, 3M is providing information on the regulatory status of many 3M products. Further regulation information including that for OSHA, USCPSI, California Proposition 65, READY and RoHS, can be found at 3M.com/regs.

Automotive Disclaimer

Select Automotive Applications:
This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

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 is a trademark of 3M Company
© 3M 2013 (11/13)