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)

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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

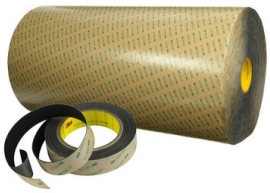
산업용 소재·건축자재

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

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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.



English-US

Last Revision Date: August, 2024

Supersedes: June, 2024

Technical Data Sheet

3M™ Gripping Material GM641

Product Details

Product Description

Finite Element Analysis (FEA)data is available for this product at: **3m.com/FEA**

3M™ Gripping Material utilizes 3M's proprietary micro-replication technology to create a high-friction surface which can enhance grip and reduce slippage. These Pressure Sensitive Adhesive (PSA) versions of 3M™ Gripping Materials are constructed using a thin flexible fabric backing laminated to an acrylic PSA which is designed to bond to a wide variety of surfaces; including low surface energy substrates. These products all utilize the same 300LSE PSA which allows the Gripping Materials to be easily applied using a peel and stick application. 3M™ Gripping Material products are designed to be used alone, or as a two- part mated system. When used alone (on a single surface), the soft 3M™ Gripping Materials provide a strong secure grip. When used as a two-part mated system, for example, on a glove and handle bar, grip strength is maximized. As firmly as 3M™ Gripping Material holds, it releases just as easily.

Product Features

• Composed of tough, durable thermo-plastic elastomer
• The 3M™ Gripping Materials contain 3,000 stems or 'tiny fingers' per square inch to provide excellent grip performance in both wet and dry conditions
• Stems can provide a cushioned feel for many applications
• Good abrasion resistance
• Reinforced with polyester knit
• Wide useable temperature range: -40°F to 140°F (-40°C to 60°C) (Dependent upon the particular application)
• Contains mineral oil which can migrate out of the product under some conditions
• This product can also be ordered with 6035PC PSA

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
Color		Black
Weight (Without liner)		568 g/m² (16.8 oz/yd²)
Total Tape Thickness	ASTM D3652	0.97 mm (38 mil)
Shore A Hardness	ASTM D2240	40

Typical Performance Characteristics

Attribute Name	Test Method	Test Condition	Value
Elongation at Break	ASTM D882	Machine Direction	55 %
Elongation at Break	ASTM D882	Cross Direction	101 %
Tensile Strength	ASTM D5035	Machine Direction	41.5 N/cm (23.7 lb/in)
Tensile Strength	ASTM D5035	Cross Direction	49.3 N/cm (28 lb/in)

Attribute Name	Test Method	Test Condition	Value
Tear Resistance	ASTM D5734	Machine Direction	10.4 N (2.3 lb)
Tear Resistance	ASTM D5734	Cross Direction	12.7 N (2.8 lb)
Abrasion Resistance	ASTM D3389	Wear through	3,000 revolutions [1]
Abrasion Resistance		Wear rate	0.21 mg/revolution [2]

Attribute Name	Test Method	Test Condition	Value
Coefficient of Friction	ASTM D1894	Grip to Grip System – Dry / Wet	2.6/2.1 [3]
Coefficient of Friction	ASTM D1894	Grip to Synthetic Classic Leather – Dry / Wet	1.9/1.3 [4]

[1] H18, 500g

[2] Weight loss rate at 1000 revolutions

[3] COF of 3M™ Gripping Material to itself.

[4] Synthetic Nassimi Classic Faux Leather (Vinyl)

Converting

Pressure Sensitive Adhesive backed 3M™ Gripping Materials can be shear cut, die-cut, or converted by other applicable methods. Minimum tension should be used to avoid stretching and distortion of the product. Avoid direct contact with heated processing surfaces, in excess of 160°F (71°C), for prolonged periods of time.

Handling/Application Information

Application Examples

When used to spiral wrap a handle, it is recommended that electrical tape be used to finish off the ends of the wrap. This helps the wrap look great and prevents ends from lifting during use.

Application Techniques

For maximum bond strength, the substrates surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane and isopropyl alcohol. Test the substrate surface to ensure the solvents clean the surface properly and do not harm the surface. Carefully read and follow the manufacturer's precautions and directions for use when using cleaning solvents. This cleaning recommendation may not be compliant with the rules of certain Air Quality Management Districts in California; consult applicable rules before use.

Ideal tape temperature application range is 70°F to 100°F (21°C to 38°C). Application to substrate surfaces that are below 50°C is not recommended because the adhesive can become too firm to adhere readily. Once properly adhered, low temperature holding is generally satisfactory.

Firm, even pressure should be used when applying 3M™ Gripping Material to ensure good adhesion between the substrate and adhesive. Minimum tension should be used to avoid stretching and distortion of the product. In some applications, a roller may be used to apply the 3M™ Gripping Material, but care must be taken to ensure that this does not damage the stems of the 3M™ Gripping Material.

3M™ Gripping Material will bond on contact, so parts can be handled immediately. Once applied, adhesive bond strength will continue to increase with time, pressure, and temperature. At room temperature, approximately 50% of the ultimate strength will be achieved after 20 minutes, 90% after 24 hours, and 100% after 72 hours.

Bond strength can be improved with firm application pressure and moderate heat, from 100°F (38°C) to 130°F (54°C), which causes the adhesive to develop improved contact with the substrate surface. Abrasion of the substrate surface and / or the use of 3M Primers / Adhesion Promoters such as 3M™ Primer 94 and 3M™ Adhesion Promoter 111 can also be used. Consult the Technical Data Sheets for these and other 3M Primers / Adhesion Promoters for additional information.

Maintenance

3M™ Gripping Materials can be hand washed with mild detergent in cool to warm water. Surface contamination – lint or other debris – can be easily removed with Scotch® Tape, Scotch® Lint Roller and Scotch® Lint Sheets, or other lint removing mechanisms.

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 18 months from date of manufacture.

Available Sizes

Attribute Name	Value
Standard Roll Length	32.9, 65.8 m (36, 72 yd)
Standard Width	2.54, 61 cm (1, 24 in)

Information

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ISO Statement

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

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3M.com/iatd

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