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

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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

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Supersedes: September, 2024

Technical Data Sheet

3M™ Double Coated Tissue Tape 56412

Product Details

Product Description

3M™ Double Coated Tissue Tape 56412 is a high tack, multipurpose tape engineered to provide durable bonds to a variety of materials, including low surface energy plastics – even at low temperatures. Target applications include Plastics Assembly, Dissimilar Material Bonding, Durable Graphic Bonding, Foam Lamination and Bonding, and Packaging and Paper Bonding.

Product Features

- High initial tack - quick stick for fast and secure bonding
- Excellent low temperature performance
- Reworkable – resists tissue splitting when peeled or removed
- Translucent tape
- Conformable tape holds to curved and uneven surfaces
- Made via a solvent-free adhesive coating process

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 Carrier		Translucent Tissue
Carrier Thickness		0.033 mm (1.3 mil)
Total Tape Thickness	ASTM D3652	0.12 mm (4.7 mil)
Liner		PCK
Liner Thickness		0.135 mm (5.3 mil)
Primary Liner Color		White

Typical Performance Characteristics

180° Peel Adhesion

Backing: 2 mil Aluminum Foil
Test Method: ASTM D3330

Dwell Time	Temperature	Substrate	Value
20 min	23 °C (73 °F)	Stainless Steel	5.8 N/cm (53.0 oz/in) [1]
72 h	23 °C (73 °F)	Stainless Steel	7.5 N/cm (68.3 oz/in) [1]
72 h	70 °C (158 °F)	Stainless Steel	9.1 N/cm (83.1 oz/in) [1]
20 min	23 °C (73 °F)	Polypropylene (PP)	7.1 N/cm (65.1 oz/in) [1]
72 h	23 °C (73 °F)	Polypropylene (PP)	9.6 N/cm (87.3 oz/in) [1]
72 h	70 °C (158 °F)	Polypropylene (PP)	6.5 N/cm (59.5 oz/in) [1]
20 min	23 °C (73 °F)	Polycarbonate (PC)	7.7 N/cm (70.1 oz/in) [1]
72 h	23 °C (73 °F)	Polycarbonate (PC)	7.6 N/cm (69.8 oz/in) [1]
72 h	70 °C (158 °F)	Polycarbonate (PC)	8.6 N/cm (78.1 oz/in) [1]
20 min	23 °C (73 °F)	ABS	2.9 N/cm (26.2 oz/in) [1]
72 h	23 °C (73 °F)	ABS	4.3 N/cm (39.4 oz/in) [1]

Dwell Time	Temperature	Substrate	Value
72 h	70 °C (158 °F)	ABS	9.0 N/cm (81.9 oz/in) [1]

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

90° Peel Adhesion

Backing: 2 mil Aluminum Foil
Test Method: ASTM D3330

Dwell Time	Temperature	Substrate	Value
20 min	23 °C (73 °F)	Stainless Steel	5.3 N/cm (48.6 oz/in) [1]
72 h	23 °C (73 °F)	Stainless Steel	6.2 N/cm (56.8 oz/in) [1]
72 h	70 °C (158 °F)	Stainless Steel	7.5 N/cm (68.7 oz/in) [1]
20 min	23 °C (73 °F)	Polypropylene (PP)	5.3 N/cm (48.4 oz/in) [1]
72 h	23 °C (73 °F)	Polypropylene (PP)	7.0 N/cm (63.6 oz/in) [1]
72 h	70 °C (158 °F)	Polypropylene (PP)	4.7 N/cm (42.5 oz/in) [1]
20 min	23 °C (73 °F)	Polycarbonate (PC)	6.0 N/cm (54.8 oz/in) [1]
72 h	23 °C (73 °F)	Polycarbonate (PC)	7.6 N/cm (69.8 oz/in) [1]
72 h	70 °C (158 °F)	Polycarbonate (PC)	6.9 N/cm (62.6 oz/in) [1]
20 min	23 °C (73 °F)	ABS	2.7 N/cm (24.6 oz/in) [1]
72 h	23 °C (73 °F)	ABS	4.1 N/cm (37.2 oz/in) [1]
72 h	70 °C (158 °F)	ABS	6.0 N/cm (54.6 oz/in) [1]

[1] 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

Attribute Name	Value
Long Term Temperature Resistance	70 °C (158 °F) [1]
Short Term Temperature Resistance	121 °C (250 °F) [2]
Long Term Temperature Resistance	121 °C (250 °F) [3]

[1] Maximum temperature where tape supports 500g load per 6.5cm² (1 in²) in static shear for 10,000 minutes.
[2] Maximum temperature where tape supports 500g load per 6.5cm² (1 in²) in static shear for 60 minutes.
[3] Maximum temperature where tape supports 200g load per 6.5cm² (1 in²) in static shear for 10,000 minutes.

T-Peel Adhesion

Temperature: 23 °C (73 °F)
Dwell Time: 72 h
Backing: 2 mil Aluminum Foil
Test Method: ASTM D1876

Substrate	Value
EPDM	Foam Tear [1]
Polyester Urethane Foam	Foam Picking [1]

Substrate	Value
Cross-linked Polyethylene Foam	Foam Picking [1]

[1] Failure mode

Typical Environmental Performance

Temperature: 32 °C (90 °F)
Dwell Time: 72 h
Backing: 2 mil Aluminum Foil
Test Method: ASTM D3330
Environmental Condition: 90 %RH

Attribute Name	Substrate	Value
180° Peel Adhesion	Stainless Steel	7.1 N/cm (64.5 oz/in) [1]
90° Peel Adhesion	Stainless Steel	6.3 N/cm (57.3 oz/in) [1]
180° Peel Adhesion	Polypropylene (PP)	9.5 N/cm (86.9 oz/in) [1]
90° Peel Adhesion	Polypropylene (PP)	6.8 N/cm (62.2 oz/in) [1]
180° Peel Adhesion	Polycarbonate (PC)	8.7 N/cm (79.0 oz/in)
90° Peel Adhesion	Polycarbonate (PC)	6.0 N/cm (54.8 oz/in)
180° Peel Adhesion	ABS	4.6 N/cm (41.7 oz/in) [1]
90° Peel Adhesion	ABS	3.9 N/cm (35.5 oz/in) [1]

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

Electrical and Thermal Properties

Attribute Name	Test Method	Value
Glass Transition Temperature (Tg)	ASTM E1356	-46 °C (-51 °F) [1]

[1] Glass Transition Temperature (Tg) determined using DSC Analyzer with a heating rate of 4 °C per minute. First heat values given.

Handling/Application Information

Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improves bond strength.
To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.*
Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C).
*Carefully read and follow the manufacturer’s precautions and directions for use when working with solvents. These cleaning recommendations may not be compliant with
the rules of certain Air Quality Management Districts in California; consult applicable rules before use.

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.

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.

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