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: September, 2024

Supersedes: June, 2024

Technical Data Sheet

3M™ Scotch-Weld™ Urethane Adhesive 3535 B/A

Regulatory Info/SDS

Product Description

• 3M™ Scotch-Weld™ Urethane Adhesives 3535 B/A is a two-component, polyurethane adhesives which cure at room temperature or with heat to form tough, impact-resistant structural bonds. Their adhesion properties are identical and they vary only in work life, cure time and color. They provide excellent adhesion to many primed or painted metal and plastic substrates and are designed to develop sag resistance approximately 30 seconds after mixing.
• 3M™ Scotch-Weld™ Structural Adhesive Primer EC-3901 is suggested for use on metal surfaces to achieve maximum resistance to water, humidity and salt spray. (See Primer Information in Directions for Use section)

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 Uncured Physical Properties

Attribute Name	Value
Color	Off-White [1]
Mix Ratio by Weight (B:A)	100:105
Mix Ratio by Volume (B:A)	100:100

[1] Colors may vary from nearly white to yellow/amber. Adhesive performance is not affected by color variation.

Attribute Name	Temperature	Value
Base Color		White
Accelerator Color		Brown
Base Resin		Polyol
Accelerator Resin		Isocyanate
Base Density		10.9 lb/gal
Accelerator Density		11.3 lb/gal
Base Viscosity	23 °C (73 °F)	5,000-40,000 cP [1]
Accelerator Viscosity	23 °C (73 °F)	15,000-40,000 cP [2]

[1] Brookfield RVF #6 sp. @ 10 rpm
[2] Brookfield RVF #5 sp. @ 10 rpm

Typical Mixed Physical Properties

Temperature: 23 °C (73 °F)

Attribute Name	Value
Worklife, 100g mixed	45 — 240 s
Time to Full Cure	7 d

Rate of Strength Buildup

Substrate: Etched Aluminum
Temperature: 23 °C (73 °F)
Test Method: ASTM D1002, ISO 4587

Dwell Time	Value
5 min	0 lb/in² [1]
15 min	16 lb/in² [1]
30 min	227 lb/in² [1]
45 min	689 lb/in² [2]
1 h	858 lb/in² [1]
75 min	1,202 lb/in² [2]
90 min	1,507 lb/in² [2]
105 min	1,640 lb/in² [2]
2 h	1,460 lb/in² [1]
3 h	1,877 lb/in² [1]

[1] 25 mm (1 in) wide 12.7 mm (0.5 in) overlap specimens with 25 mm x 102 mm (1 in x 4 in) substrates. 13 - 20 µm (0.005-0.008 in) bondline.
Jaw separation 2.5 mm/min (0.1 in/min)
Substrate thickness 1.3 - 1.6 mm (0.05-0.064 in)
Cohesive (CF), Adhesive (AF), Substrate (SF) Failure

[2] Specimens: 1/2-inch overlap prepared from 1 x 4-inch x 2024 T-3 clad FPL etched aluminum. Specimens were pulled at 2 inches/min.

Typical Physical Properties

Attribute Name	Value
Cured Color	Off-White

Typical Cured Characteristics

Environmental Condition: 60 min @ 121 °C (250 °F), 30 min at 141 °C (285 °F)

Attribute Name	Test Method	Value
Elongation	ASTM D738	96 % [1]

[1] tested at 2 inches/min.

Typical Performance Characteristics

Overlap Shear Strength

Surface Prep: Solvent Wipe
Temperature: 23 °C (73 °F)
Dwell Time: 7 d
Test Method: ASTM D1002, ISO 4587

Substrate	Value
Aluminum	1,000 lb/in² [1]
Steel	700 lb/in² [1]

[1] 25 mm (1") wide, 12.7 mm (1/2") overlap samples, 25 mm (1") x 102 mm (4") substrates, bondline thickness: 0.13-0.20 mm (5-8 mil)
Separation rate 2.5 mm/min (0.1 in/min) metal, 51 mm/min (2 in/min) plastic, 510 mm/min (20 in/min) rubber.
Substrate thickness: steel 1.5 mm (60 mil), other metal 1.3-1.6 mm (50-64 mil), rubber and plastic 3.2 mm (125 mil)
Cohesive Failure (CF), Adhesive Failure (AF), Mixed Failure (MF), Substrate Failure (SF)

Temperature: 121 °C (250 °F)
Test Condition: 23 °C
Dwell Time: 60 min
Environmental Condition: +30 min @ 141 °C (285 °F)

Attribute Name	Test Method	Value
Tensile Strength at Break	ASTM D738	3,000 lb/in² [1]

[1] tested at 2 inches/min.

Handling/Application Information

Directions for Use

1. Surfaces to be bonded must be dry and free from rust, oil, grease and wax. Surfaces can be cleaned with an abrasive such as 3MTM Coated Abrasives (240 grit) followed by wiping with a solvent such as Scotch-GripTM Solvent No. 3.*
2. Primer Information:
3M™ Scotch-Weld™ Structural Adhesive Primer EC-3901 may be applied by spray or brush. Air dry cycles for periods as short as 1/2 hour have been used successfully with the force dry cycle. Humidity contributes greatly to satisfactory use of this primer. Relative humidity of 25% or lower may cause difficulties and should be thoroughly evaluated in the customers' application. The primed surface, after cooling to ambient temperatures, is ready for adhesive bonding. The primed surface should be protected from contamination introduced by dust, fingerprints, oil, etc.
See Data Sheet for Scotch-Weld Structural Adhesive Primer EC-3901 for directions for use.
*Note: When using solvents, extinguish all ignition sources and follow the manufacturer's precautions and directions for use when handling such materials.

Application Equipment

These products may be applied with spatula, trowel, or flow equipment. Appropriate two-part metering and mixing equipment is also commercially available.

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, unopened packaging, out of direct sunlight. Lower temperatures cause increased viscosity of a temporary nature. For best performance, use this product within 18 months from date of manufacture.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577

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

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ISO Statement

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

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