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

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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™ Low Odor Acrylic Adhesive DP810 Black

Product Details

Regulatory Info/SDS

Product Description

3M™ Scotch-Weld™ Low Odor Acrylic Adhesives are two-part, 1:1 mix ratio, toughened structural adhesives with less odor than most acrylic adhesives. These adhesives have excellent shear and peel strength along with good impact resistance and durability. They can quickly bond to most metals, ceramics, rubbers, plastics and wood with minimal surface preparation.

Product Features

- Tough, durable bonds
- Low odor acrylic adhesive
- Minimal surface prep
- 10 minute work life
- 20 minute time to handling strength
- 1:1 mix ratio
- Bonds stainless steel
- Excellent shear and peel strength

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
Mix Ratio by Weight (B:A)	1:1
Mix Ratio by Volume (B:A)	1:1

Attribute Name	Temperature	Value
Base Color		Green
Accelerator Color		White
Base Resin		Acrylic
Accelerator Resin		Acrylic
Base Net Weight		8.7 — 9.1 lb/gal
Accelerator Net Weight		8.7 — 9.1 lb/gal
Base Viscosity	23 °C (73 °F)	18000 — 22000 cP [1]
Accelerator Viscosity	23 °C (73 °F)	17000 — 21000 cP [2]

[1] Viscosity obtained by Brookfield, DV-II, #7 Spindle, 20 rpm

[2] Viscosity obtained by Brookfield, DV-II, #7 Spindle, 20 rpm.

Typical Mixed Physical Properties

Temperature: 23 °C (73 °F)

Attribute Name	Value
Worklife	10 min
Set Time (min)	20 min [1]

[1] Minimum time required to achieve 0.3 MPa (50 psi) of overlap shear strength. Cure times are approximate and depend on adhesive temperature.

Typical Cure Profiles

Overlap Shear Strength

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

Dwell Time	Value
24 h	24.8 MPa (3600 lb/in²) [1]
1 h	15.5 MPa (2250 lb/in²) [1]
2 h	18.9 MPa (2750 lb/in²) [1]
4 h	20.0 MPa (2900 lb/in²) [1]

[1] Bond dimensions: 12.7mm x 25.4mm x 0.15mm. Pull rate: 10 mm/min.

Typical Performance Characteristics

Overlap Shear Strength

Temperature: 23 °C (73 °F)
Test Condition: 23 °C
Dwell Time: 24 h
Test Method: ASTM D1002, ISO 4587

Substrate	Surface Prep	Value
Aluminum	Etched	29 MPa (4200 lb/in²) (CF) [1]
Aluminum	Light Abrasion and Solvent Clean	27 MPa (3900 lb/in²) (CF) [1]
Cold Rolled Steel	Light Abrasion and Solvent Clean	21 MPa (3100 lb/in²) (CF) [1]
Stainless Steel	Light Abrasion and Solvent Clean	23 MPa (3400 lb/in²) (CF) [1]
Acrylic (PMMA)	Solvent Wipe	7.6 MPa (1100 lb/in²) (SF) [1]
Polyvinyl chloride (PVC)	Solvent Wipe	6.9 MPa (1000 lb/in²) (SF) [1]
ABS	Solvent Wipe	4.1 MPa (600 lb/in²) (MM) [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)

Substrate: Etched Aluminum
Temperature: 23 °C (73 °F)

Attribute Name	Test Method	Value
T-Peel Adhesion	ASTM D1876	30 lb/in [1]

[1] T-peel strengths were measured on 25 mm (1 in) wide bonds. The testing jaw separation rate was 508 mm/min (20 in/min). 0.81 mm (0.032 in) thick substrate; 0.43 - 0.51 mm (17 - 20 mil) bondline

Handling/Application Information

Directions for Use

Apply adhesive to clean, dry substrates, which are free of paint, oxide films, oils, dust, mold release agents and all other surface contaminants. See the Surface Preparation section for specific substrate preparation method.
48.5 ml cartridge:.
Place Duo-Pak cartridge in 3M™ EPX™ Applicator. Remove cap. Dispense and discard a small amount of adhesive to assure even ratio and free flow. Clear orifice if necessary. Attach mixing nozzle. Apply adhesive to clean surfaces, join parts, secure until adhesive sets.
200/400 ml cartridge
While holding Duo-Pak cartridge in an upright position, remove and discard the insert from the cartridge by unscrewing plastic nut and removing metal washer. Place cartridge in a 1:1 200/400 ml EPX applicator. Dispense and discard a small amount of adhesive to ensure even ratio and free flow. Attach mixing and nozzle and secure with plastic retaining nut. Apply adhesive to clean surfaces, join parts, secure until adhesive sets.
Clean-up:
Excess adhesive can be removed with solvent such as MEK*. part or bond line can be removed with isopropyl alcohol.*
Edge tack on a finished
*Note: When using solvents, extinguish all ignition sources and follow the manufacturer's precautions and directions for use.
Heat Cure:
Full cure can be attained by raising the bondline temperature to 120°F (49°C) for 30 minutes or to 150°F (66°C) for 10 minutes.

Surface Preparation

3M™ Scotch-Weld™ Low Odor Acrylic Adhesives can bond oily metal, plastic and other substrates with very little surface preparation. However, for the most consistent results and environmental resistance,
all substrates should be clean, dry and free of paint, oxide films, dust, mold release agents and all other surface contaminants. The amount of surface preparation directly depends on the bond strength and environmental resistance desired by the user.
The following cleaning methods are suggested for common surfaces.
Steel and Aluminum
1) Wipe free of dust with oil-free solvent such as acetone or isopropyl alcohol.*
2) Sandblast or abrade using clean fine grit abrasives (180 grit or finer).
3) Wipe again with solvent to remove loose particles.*
4) If a primer is used, it should be applied within 4 hours after surface preparation (or see instructions pertinent to a specific primer).
Note: Aluminum may also be acid etched. Follow the manufacturer's precautions and directions for this procedure.
Plastic/Rubber
1) Wipe with isopropyl alcohol.*
2) Abrade using fine grit abrasives (180 grit or finer).
3) Remove residue by wiping again with isopropyl alcohol.*
*__Note:__When using solvents, extinguish all ignition sources and follow the manufacturer's precautions and directions for use.

Storage and Shelf Life

Store product at 0 to 4°C (32 to 40°F) in the original, unopened packaging. Do not freeze. Allow product to reach room temperature prior to use. For best performance, use cartridges within 15 months, and bulk pails within 6 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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