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# 3M™ Scotch-Weld™ Super Fast Instant Adhesive SF100

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## Product Description

3M™ Scotch-Weld™ Super Fast Instant Adhesives rely less on surface moisture for cure speed than standard cyanoacrylates. They are designed to join together difficult-to-bond plastics and rubbers, acidic and/or contaminated surfaces such as woods, leathers, cardboard, and oily surfaces. These cyanoacrylates can be used for a super fast cure in high speed production applications.

## Product Features

3M™ Scotch-Weld™ Super Fast Instant Adhesive SF100 is a low viscosity super fast cyanoacrylate.

## 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

| Property | Values | Additional Information |
|---|---|---|
| Color | Clear | View |
| Notes: Colors may vary from nearly white to yellow/amber. Adhesive performance is not affected by color variation. | | |
| Viscosity | 70 to 110 cP | View |
| Notes: Cone-Plate viscosity, CP75 at 3000/s shear rate | | |
| Base | Ethyl Hybrid | |

## Typical Mixed Physical Properties

| Property | Values | Additional Information |
|---|---|---|
| Time to Handling Strength | <10 s | View |
| Notes: Min time between bond creation and ability to support a 5 psi tensile load. Open and set times determined by RT environment. Higher temps will lengthen open and set times, while lower temperatures will shorten open time and set time. | | |
| Time to Full Cure | 24 hr | View |
| Temp C: 23C<br>Temp F: 73F | | |
| Percent of Initial Strength | 100 % | View |

| | | |
|---|---|---|
| Temp C: 23C<br>Temp F: 73F | | |
| Percent of Initial Strength | 75 % | View |
| Temp F: 167F | | |
| Percent of Initial Strength | 59 % | View |
| Temp F: 212F | | |
| Percent of Initial Strength | 18 % | View |
| Temp F: 257F | | |
| Gap Fill | 0.006 in | |

## Typical Physical Properties

| Property | Values | Additional Information |
|---|---|---|
| Specific Gravity | 1.06 g/mL | |
| Appearance | Liquid | |

## Storage and Shelf Life

For short term storage (<30 days), keep adhesive in a cool (60°F to 80°F [16°C to 27°C]), dry place out of direct sunlight. Keep containers tightly covered and free of moisture. Refrigeration (40°F [4°C]) gives optimum long term storage stability.
3M™ Scotch-Weld™ Super Fast Instant Adhesives can be expected to have a shelf life of 15 months from the date of manufacture when stored under refrigerated conditions.

## Bottom Matter

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550

## Trademarks



## Automotive Disclaimer

Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, including, but not limited to, automotive electric powertrain battery or high voltage applications. This product does not fully adhere to typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility and may not meet a Ppk of 1.33 for all properties. The product may not undergo an automotive production part approval process (PPAP). Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property. No written or verbal statement, report, data or recommendation by 3M related to automotive use of the product shall have any force or effect unless in an agreement

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## Handling/Application Information

Directions for Use

1. Ensure that parts are clean, dry, and free from oil and grease.

2. An instant adhesive activator may be required if there are bonding gaps or porous substrate surfaces, if substrates are low surface energy plastics (e.g., polyethylene, polypropylene) or if substrates have acidic surfaces (e.g., paper, leather).

3. Bond speed is typically very fast so ensure that parts are properly aligned before dispensing.

4. Product is normally hand applied from the bottle. Apply sparingly to one surface and press parts firmly together until handling strength is achieved. As a general rule, as little cyanoacrylate as possible should be used. Over application will result in slower cure speed and lower bond strength.

Surface Preparation

For optimum strength structural bonds, paint, oxide films, oils, dust, mold release agents, and all other surface contaminants must be completely removed. However, the amount of surface preparation depends on the required bond strength and the environmental aging resistance desired by the user. Typical quick surface preparation would include wiping with a clean solvent (such as isopropyl alcohol*), abrading the surface with a clean fine abrasive, and then wiping again with a clean solvent to remove loose particles.

*Note: When using solvents, extinguish all ignition sources, including pilot lights, and follow the manufacturer's precautions and directions for use.

Cured Bond Characteristics

1. Full bond strength will typically be achieved within a 24 hour cure time.

2. Low humidity or low temperature conditions will slow down the cure rate.

3. After curing, 3M™ Scotch-Weld™ Super Fast Instant Adhesive bonds are suitable for use up to about 180°F (82°C).

4. Cyanoacrylate bond resistance to most oils and solvents is excellent. Long term humidity, moisture, or water immersion may affect the strength of a cured cyanoacrylate bond depending on the substrates and the bond gap. Testing is recommended to evaluate the effect.

## References

| Property | Values |
|---|---|
| 3m.com Product Page | https://www.3m.com/3M/en_US/p/d/b40066913/ |
| Safety Data Sheet SDS | https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=SF100 |

## Family Group

Link Tags:

SF20 SF100

| **Products** | **Time to Full Cure** |
|---|---|
| SF100 | 24 hr |
| SF20 | 24 hr |

## ISO Statement

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

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## 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 or (651) 737-6501.

## Information

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