



Technical Data Sheet

3M™ Scotch-Weld™ Plastic and Rubber Instant Adhesive PR40

Product Description

3M™ Scotch-Weld™ Plastic and Rubber Instant Adhesives are designed to give exceptional performance on difficult-to-bond plastic and rubber substrates. These adhesives may be bonded to like substrates or in combination with metal or composite substrates. Superior performance is achieved on materials such as heavily plasticized PVC, EPDM, ABS, Nylon, Santoprene®, and Viton®.

Product Features

- 3M™ Scotch-Weld™ Plastic and Rubber Instant Adhesive PR40 is a low viscosity cyanoacrylate adhesive which bonds close-fitting plastic or rubber parts quickly and with high 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

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	20 to 45 cP	View
Notes: Cone-Plate viscosity, CP75 at 3000/s shear rate		

Base	Ethyl Hybrid	
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Typical Mixed Physical Properties

Property	Values	Additional Information
Time to Handling Strength	<15 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 Temp F: 73F		

Percent of Initial Strength 100 % View 

Temp C: 23C
Temp F: 73F

Percent of Initial Strength 81 % View 

Temp F: 167F

Percent of Initial Strength 80 % View 

Temp F: 212F

Percent of Initial Strength 53 % View 

Temp F: 257F

Gap Fill 0.004 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™ Metal Instant Adhesives can be expected to have a shelf life of 15 months from date of manufacture when stored under refrigerated conditions.

Bottom Matter

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Santoprene is a registered trademark of ExxonMobil Chemical.
Viton is a registered trademark of E.I. DuPont de Nemours Co.

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

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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™ Plastic and Rubber 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/b40066945/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=PR40

Family Group

Link Tags:

- [PR40](#)
- [PR100](#)
- [PR600](#)
- [PR1500](#)
- [PR Gel](#)

Products

Time to Full Cure

PR Gel	24 hr
PR100	24 hr
PR1500	24 hr
PR600	24 hr
PR40	24 hr

ISO Statement

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

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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