



# Technical Data Sheet

3M™ Scotch-Weld™ Plastic and Rubber Instant Adhesive PR Gel

### **Product Description**

3M<sup>™</sup> Scotch-Weld<sup>™</sup> 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 PR Gel is a fast curing, very high viscosity, gap-filling cyanoacrylate. Its gel formulation is suitable for bonding poorly mating components and for porous substrates and can be used on vertical surfaces as it will not drip or slump.

### 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	100,000-150,000 cP	View ^	
Notes: Brookfield viscosity, Spindle TC @ 2.5 rpm			
Base	Ethyl Hybrid		

# Typical Mixed Physical Properties

Property	Values	Additional Information
Time to Handling Strength	<25 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	84 %	View ^
Temp F: 167F		
Percent of Initial Strength	41 %	View ^
Temp F: 212F		
Percent of Initial Strength	13 %	View ^
Temp F: 257F		
Gap Fill	0.02 in	

### Typical Physical Properties

Property	Values	Additional Information
Specific Gravity	1.1 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™ Plastic and Rubber Instant Adhesives can be expected to have a shelf life of 15 months from 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

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#### 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

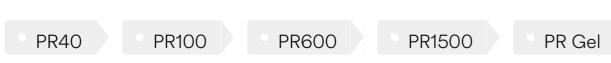
- 1. Full bond strength will typically be achieved within a 24 hour cure time.
- 2. Low humidity or low temperature conditions will slow down the cure rate.
- 3. After curing, 3M™ Scotch-Weld™ Plastic and Rubber Instant Adhesive bonds are suitable for use up to about 180°F (82°C).
- 4. Cyanoacrylate 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/b40066915/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/? gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=PR Gel

### Family Group

Link Tags:



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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