



# Scotch-Weld™ Cyanoacrylate Adhesive PR5

## Product Data Sheet

Updated :February 2010  
Supersedes:February 2007

**Product Description** Scotch-Weld PR5 is a very low viscosity (5 cPs) Ethyl Cyanoacrylate based adhesive. PR5 is formulated for very high speed, high strength bonding of plastics and rubbers, but is also suitable for bonding a very wide range of materials.

**Key Features** PR5 is specially formulated for high strength, general purpose bonding of most plastics and rubbers. Recommended for use on assemblies with very fitting parts and smooth, even surfaces.  
**Scotch-Weld PR grade cyanoacrylates are certified to USP Class VI**

### Physical Properties

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| <b>Base</b>             | Ethyl                        |
| <b>Soluble In</b>       | Acetone, MEK                 |
| <b>Viscosity (cps)</b>  | Range 2-6<br>Typical Value 5 |
| <b>Specific Gravity</b> | 1.05                         |
| <b>Colour</b>           | Clear                        |

### Performance Characteristics

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| <b>Maximum Gap Fill</b> (best results are obtained with very thin bond lines) | 0.05mm  |
| <b>Fixture Time</b>   | 1-10secs  |
| <b>Tensile Strength</b> (ISO 6922)  | 20 N/mm <sup>2</sup>  |
| <b>Full Cure</b>  | 24hrs   |
| <b>Speed of Cure</b>  | The speed of cure of cyanoacrylates varies according to the substrate to be bonded. Acidic surfaces such as paper and leather will have longer cure times than most plastics and rubbers. |
| <b>Moisture Resistance</b>  | Low resistance to high levels of moisture and humidity over time.   |
| <b>Service Temperature Range</b>  | -50 to +80°C  |

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| <b>Additional Product Information</b> | Scotch-Weld Activators AC11 and AC12 may be used in conjunction with Scotch-Weld cyanoacrylates where cure speed needs to be accelerated. Cure speeds of less than 2 seconds can be obtained with most Scotch-Weld cyanoacrylates. The use of an activator can reduce the final bond strength by up to 30%. |
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| <b>Application Techniques</b> | Bond speed is very fast so ensure that parts are properly aligned before bonding. Scotch-Weld Activators may be required if there are gaps or porous surfaces. Some plastics may require application of Scotch-Weld AC77 Primer. Ensure parts are clean, dry and free from oil and grease. 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 slow cure speed and lower bond strength. |
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| <b>Storage Conditions</b> | Keep the adhesive in a cool, dry place away from direct sunlight. Under such conditions shelf life at room temperature will be 12 months.<br><br>Refrigeration to 5°C gives optimum storage stability. |
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| <b>Shelf Life</b> | 12 months from date of despatch by 3M when stored in the original carton at 21°C |
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| <b>Precautionary Information</b> | Refer to product label and material Safety Data Sheet for health and safety information before using the product. For information please contact your local 3M Office. <a href="http://www.3M.com">www.3M.com</a> |
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| <b>For Additional Information</b> | To request additional information or to arrange for sales assistance, call 0870 6080050 Address correspondence to: 3M United Kingdom PLC, 3M House, 28 Great Jackson Street, Manchester, M15 4PA |
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| <b>Important Notice</b> | All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law |
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Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications.

This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations

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