



# Scotch-Weld™ Cyanoacrylate

## Adhesive SIGel

### Product Data Sheet

Updated : February 2010  
Supersedes: February 2007

**Product Description** Scotch-Weld SIGel instant superglue is a faster curing, very high viscosity Ethyl Cyanoacrylate based adhesive. The new formulation shows greater surface insensitivity thus allowing faster bonding of all substrates and improved performance on wood, card and metals. The new gel formulation exhibits improved thixotropic behaviour and uniform appearance.

**Key Features** SIGel is specially formulated for high strength, general purpose bonding of most metals, wood, card, plastics, rubber, leather, fabrics and other common substrates. The gel formulation is suitable for bonding poorly mating components and for porous substrates such as china and other ceramics. It is also suitable for use on vertical and over-head surfaces as it will not drip or slump

#### Physical Properties

<b>Base</b>	Ethyl
<b>Soluble In</b>	Acetone, MEK
<b>Viscosity (cps)</b>	Range @ 2.5rpm 50-90,000 Range @ 20rpm 7-20,000
<b>Specific Gravity</b>	1.10
<b>Colour</b>	Clear

#### Performance Characteristics

<b>Maximum Gap Fill</b> (best results are obtained with very thin bond lines)	0.5mm
<b>Fixture Time</b>	3-60 secs
<b>Tensile Strength Typical</b> (ISO 6922)	21 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

<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%
<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.
<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.  Refrigeration to 5°C gives optimum storage stability.
<b>Shelf Life</b>	12 months from date of despatch by 3M when stored in the original carton at 21°C
<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>
<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
<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.
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	

3M and Scotch-Weld are trademarks of the 3M Company.

3M United Kingdom PLC  
3M House,  
28 Great Jackson Street,  
Manchester,  
M15 4PA

Product Information :  
  
Tel 0870 60 800 50  
Fax 0870 60 700 99

3M Ireland Limited  
The Iveagh Building  
The Park, Carrickmines  
Dublin 18,  
Ireland

Customer Service :  
  
Tel (01) 280 3555  
Fax (01) 280 3509