



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

Performance Characteristics	Maximum Gap Fill (best results are obtained with very thin bond lines)	0.5mm
	Fixture Time	3-60 secs
	Tensile Strength Typical (ISO 6922)	21 N/mm ²
	Full Cure	24hrs
	Speed of Cure	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.
	Moisture Resistance	Low resistance to high levels of moisture and humidity over time.
	Service Temperature Range	-50 to +80°C

Additional Product Information	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%
Application Techniques	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.
Storage Conditions	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.
Shelf Life	12 months from date of despatch by 3M when stored in the original carton at 21°C
Precautionary Information	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. www.3M.com
For Additional Information	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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