



# Technical Data Sheet

## Auto91 Instant Bond/Gap Fill Flex

### PRODUCT DESCRIPTION

Bondloc® Instant Bond/Gap Fill Flex is one of the only elastic and bulk-curing 2-part cyanoacrylate in the market. Due to its formulation based on an odourless monomer, it is a non-irritant, low odour and non-staining adhesive.

It offers an elongation >200 % with a high bonding strength. It is ideal for repairing parts that flex or move relative to each other or vibrate.

Appearance (uncured comp. A)	Transparent gel
Appearance (uncured comp. B)	Cream opaque gel
Chemical Type	Ethyl Cyanoacrylate
Components	Two-part – requires mixing
Cure	By mixing
Technology	Cyanoacrylate
Viscosity	High, thixotropic gel

### TYPICAL CURING PERFORMANCE

Under normal conditions, the atmospheric moisture initiates the curing process. Although full functional strength is developed in a relatively short time, curing continues for at least 24 hours before full chemical resistance is developed.

### FIXTURE TIMES

Fixture time is the time at which an adhesive bond (250 mm<sup>2</sup>) is capable of supporting a 3kg load for 10 seconds. The fixture time will depend on the

substrate. The table shows the fixture time for different substrates using lap shears. depend on the substrate. The table below shows the fixture time for different substrates using lap shears.

	Time (s)	Strength (N/mm <sup>2</sup> )
ABS	30 – 60	9-12*
Aluminum A5754	5 – 20	3-7
Beech Wood	15 –30	14-15*
Mild steel	15 – 45	17-20
Pine Wood	45 – 75	11-13*
Polycarbonate	15 – 45	10-12*

### TYPICAL PROPERTIES OF UNCURED MATERIAL

PART A: Specific gravity, 25 °C, g/cm<sup>3</sup>: 1.09  
 Viscosity, Brookfield, 25 °C, mPa·s (cP):  
 Spindle 14, speed 1.5 rpm 100.000 to 195000

PART B: Specific gravity, 25 °C, g/cm<sup>3</sup>: 1.17  
 Viscosity, Brookfield, 25 °C, mPa·s (cP):  
 Spindle 14, speed 1.5 rpm 80.000 to 110.000

MIXED A and B: Open time at 25 °C: 4 – 8 minutes  
 Working time at 25 °C: 5 – 10 minutes  
 Glass Transition Temperature (T<sub>g</sub>, °C): 87.2  
 Shore D Hardness: 56

### INSTRUCTIONS FOR USE

Directions for use:

- 1) Before applying the glue, make sure the gluing surface is clean, dry and free of grease.
- 2) To assemble the syringe, first introduce the plunger, then exchange the cap with a mixer. Discard the first few drops.
- 3) Apply the material on one of the two surfaces and assemble the two parts within 1 minute.
- 4) After uniting the substrates, 15-30 seconds are available for repositioning on the substrates. Press the two parts together firmly for around 30 seconds. After releasing the pressure, wait 5 minutes before good handling strength, 10 minutes for a fully cured material and 24 hours for full strength.
- 5) Make use of the syringe or discard the product at least every 2 minutes to avoid the product from polymerizing inside the mixer, if you do not want to replace the mixer.

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**PRECAUTIONS:** This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheets (SDS) for this and all other products being used are understood by all persons who will work with the product. Warranty: All products purchased from or supplied by Bondloc are subject to terms and conditions set out in the contract. Bondloc warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Bondloc is considered accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Bondloc makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will not infringe any patent.





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6) After use, discard the mixer and replace the cap. Store the syringe in a cool and dry environment.

7) Optimal Storage: 2°C to 8°C. Storage below 2°C or greater than 8°C can adversely affect product properties.

8) Product shelf-life: 12 months.

### HEALTH & SAFETY

This technical information sheet does not constitute a Safety Data Sheet (SDS). Before using this product ensure you have read and fully understood this products SDS.

### PACKAGING FORMAT

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