

**TECHNICAL DATA SHEET**

TDS N°01 / 2015.01

**ACROBOND® CA 9/S****GENERAL CHARACTERISTICS / MAIN USE :****Medium viscosity, multi-purpose cyanoacrylate adhesive**

ACROBOND® CA 9/S is a high performance, cyanoacrylate-based instant adhesive mainly designed for very fast bonding of rubber and thermoplastics but is also suitable for bonding a very wide range of other materials. This medium viscosity adhesive is formulated for high speed and high strength bonding; it can also be used on close-fitting parts and fairly smooth and even surfaces on materials such as wood, leather, PUR, metals. For thermoplastics and rubber, adhesion on polyolefin-based materials can be improved by using a special primer of our ACROBOND® PR range. Given the big quantity of various plastics and materials available on the market, adhesion must be tested for compatibility by carrying out preliminary trials. Main use is in transportation, building, marine and in many various industrial assembly processes where rubber or thermoplastics have to be bonded on other materials.




**TECHNICAL PROPERTIES OF PRODUCT :**

<b>Chemical base</b>	Modified ethyl-2-cyanoacrylate ester resin (CAS N° 7085-85-0).
<b>Colour</b>	Clear / translucent liquid.
<b>Consistency</b>	Medium viscosity liquid, very easy to apply.
<b>Density</b>	~ 1,08 g/cm <sup>3</sup>
<b>Solid content</b>	~ 100 %
<b>Viscosity</b>	~ 200 mPa.s
<b>Coating thickness</b>	Maximum gap fill: ≤ 0,15 mm (cure speed is much faster and results better for thin layers).
<b>Fixture time</b>	~ 5-30 seconds (typical speed is 5-10 sec. for rubber, 10-20 sec. for plastics, ~30 seconds for steel).
<b>Curing time</b>	~ 24 hours for full curing.
<b>Temperature resistance</b>	Operating temperature of cured bond: -40°C to +80°C (short time ≤ +100°C can partly be acceptable).
<b>Film properties</b>	Cured adhesive film is hard and tough with good ageing and chemical resistance. Humidity resistance is only moderate. Tensile strength: ≤ 20 MPa.

**PREPARATION AND PROCESSING :**

<b>Materials and Surfaces</b>	Surfaces to be coated must be even, close-fitting, clean, dry and free of any dust, oil and grease. Store the materials and do not process below +15°C. A primer coat may be applied in some special cases. For special requirements or on not common materials or metals, we recommend doing preliminary and adapted testing to ensure expected bonding results will be achieved. Our technical department is available for any additional assistance or technical advice you might need.
<b>Processing</b>	After preliminary cutting of the nozzle for adapted output, ACROBOND® CA adhesives can be applied directly from the original packaging by extruding a thin adhesive layer on one of both to be bonded materials which can be joined immediately. Place both materials or parts, accurately together and firmly press strongly at a pressure around 1 kg/cm <sup>2</sup> during required speed of cure according to the substrates to be bonded. Initial strength after fixture time is very high and bonded materials can be handled already after initial fixture time when parts do; however final curing time is reached after approx. 24 hours. Final strength is only reached after approximately 24 hours.
<b>Additional information</b>	The speed of cure varies according the substrates to be bonded. Acidic surfaces such as leather will have longer cure times than most rubbers and plastics. Some plastics with very low surface energies (mainly polyolefin-based) require to use a primer. Cyanoacrylate adhesives require surface moisture in order to initiate curing mechanism. The speed of cure is reduced in low humidity conditions as well as at low temperatures. ACROBOND® CA Activator can be used when cure speed needs to be accelerated up to 2-3 seconds but can reduce the final bond strength (preliminary testing is required).
<b>Alternative adhesives</b>	Other ACROBOND® CA adhesives are available with reduced hardness, odour or blooming.
<b>Cleaning</b>	Use exclusively ACROBOND® CA Remover for cyanoacrylate adhesives.

**RECOMMENDATIONS / STORAGE / SAFETY :**

<b>Storage</b>	≤ 9 months (≥ 0°C and ≤ +10°C) in original, tightly closed packaging, protected from heat & sunlight.
<b>Packaging Transport</b>  IATA only	PE Bottles containing 20 g, 50 g or 500 g net. ADR Classification: void / not restricted - IMDG Classification: void / not restricted IATA Classification: UN 3334, Class-Label: 9, Aviation regulated liquid, n.o.s. (ethyl 2-cyanoacrylate)
<b>Handling precaution</b>	Before first using, read carefully Material Safety Data Sheet (available on request). Pictograms indicating the obligation of wearing personal protective equipment: 
<b>Labelling CLP regulation</b> Hazard Pictograms / Signal word  GHS07 Warning	Hazard statements: Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children. Main Precautionary statements: see details on Material Safety Data Sheet. General information: Take the regular precautions for handling and processing chemical products. Assure sufficient ventilation during processing. Avoid breathing vapours and direct skin contact. Wear protective gloves & glasses. IF IN EYES: Rinse cautiously with water for several minutes. For professional / industrial use only.
<b>General Information</b>	The foregoing information represents values obtained in our laboratory and has been supplied in good faith, it shall not be construed to be legally binding, in particular, it shall not exempt the purchaser from taking responsibility for testing the product supplied so as to determine its suitability for the intended application. Given the high number of materials appearing on the market and the different methods of use, which are beyond our influence and control, we cannot accept any responsibility for the results of your work. Warranty is made exclusively for the constantly high quality of our products. Please note our terms of sales, delivery & payment.