

# Permabond C920

## Cyanoacrylate Adhesive

### Technical Information Sheet

#### **Description:**

Permabond C920 is the original allyl cyanoacrylate adhesive specifically designed to provide the high temperature resistance required by certain applications. It provides excellent bond strengths on most metal surfaces and to a wide variety of plastic and rubber materials. Whilst a room temperature cure will give better temperature resistance than other cyanoacrylates maximum performance, of up to 250°C, will be achieved by using a post cure at 150°C for 2 hours.

#### **Physical Properties**

Colour	colourless
Viscosity (mPa.s) <small>* T = Thixotropic</small>	100
Specific Gravity	1.05
Tensile Strength (MPa)	20
Maximum Gap Fill (mm)	0.125
Chemical Type	Allyl Cyanoacrylate

#### **Cure Speed**

**Handling Strength** 10-30 secs.

**Full Strength** 4 hrs.

This is a typical cure speed to be expected on most rubber and plastic surfaces. The actual handling times can be affected by temperature, humidity and the specific surfaces being bonded. Larger gaps, or acidic surfaces, will also reduce the cure speed but this can be overcome by the use of **Permabond C Surface Conditioner (CSA)**.

#### **Directions for Use:**

The surfaces to be bonded should be clean and free from oil or grease. The use of **Permabond Clean II** or other organic solvents such as Acetone or Methyl Ethyl Ketone (MEK) is recommended. Persistent contamination should be removed by abrasion prior to degreasing.

Apply the adhesive sparingly to **one** surface and bring the components together quickly whilst ensuring they are correctly aligned

Squeeze the parts together with sufficient pressure to ensure the adhesive spreads to cover the surfaces. Do not disturb or realign the joint until the adhesive has reached handling strength.

#### **Storage:**

When stored in the original unopened containers between 5 and 7°C, the shelf life of this product is 6 months from the date of despatch from Permabond.

Product stored in a 'fridge should be allowed to warm up to room temperature before opening to prevent condensation causing premature hardening of the adhesive.

#### **Service Temperature:**

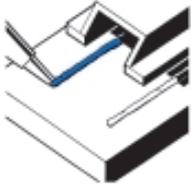
The recommended service temperature range for this product is -30 to +250°C. However higher temperatures may be endured for short periods providing the adhesive is not unduly stressed.

#### **Handling:**

Cyanoacrylate adhesives will bond skin and eyes in seconds. Contact with skin and eyes should be avoided. Use in a well ventilated area. Full information can be obtained from the Material Safety Data Sheet (MSDS).

\* Values shown are typical and should not be used for specification writing purposes. Please contact Permabond for assistance in writing specifications covering Permabond products.

# Additional Products in the Permabond Range

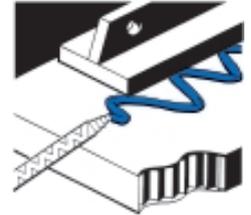


## Toughened Acrylics

For structural bonding of engineering materials, such as metal, glass, ceramic and reinforced plastic, where high stress may be encountered. Often used to replace traditional jointing methods such as riveting and welding

## Epoxy Resins

Single part epoxies for maximum performance, chemical and temperature resistance. Two part epoxies for versatility, as a wide variety of materials can be bonded. Particularly suitable where large surface areas or large gaps need to be filled.



## UV Curing

A range of adhesives specially developed for a wide selection of glass bonding and electronic assembly applications.



## Metal Repair

For the repair of holes and cracks etc., in metalwork. Particularly useful for reclaiming damaged pipes, castings, flanges or metallic vessels.



## Anaerobics

For locking and sealing of metal parts, replacing traditional time consuming and expensive techniques. Typical applications include threadlocking, pipesealing, gasketing and retaining.



## Cyanoacrylates

For rapid bonding of many different materials including plastics and rubbers, helping to speed up production lines or reduce maintenance down time.



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