

712 - Water Resistant Cyanoacrylate

Permabond 712 cyanoacrylate adhesive has been designed to offer superior bonding performance in harsh environmental conditions, including underwater submersion, heat and humidity. Conventional cyanoacrylates are prone to weakening with long exposure to water and moisture, especially when the liquid is hot.



Not so with 712! During testing, it maintained 75% strength even after 1,000 hours of exposure to 60°C water, and 90% strength during 85/85 testing (85°C and 85% relative humidity). These results demonstrate its ability to withstand adverse conditions while offering maximum performance. The adhesive also offers great chemical resistance, and will withstand exposure to oils, solvents and other chemical substances.

Permabond 712 offers a fast, room temperature cure as per other cyanoacrylates, as well as being easy to dispense. Not only that, it has a low-viscosity, is solvent-free and bonds well to a wide variety of substrates. It's ideal for use in underwater applications (post-cure) and very competitively priced.

Permabond® 712 Features & Benefits

- Withstands continuous water & moisture exposure once bonded
- Low-viscosity
- Rapid cure - ideal for high speed production lines
- Bonds well to many substrates
- Excellent adhesion to rubber
- Easy to dispense
- Solvent free = reduced workplace hazards
- Great chemical & environmental resistance
- High strength performance
- Easy use - no mixing or heat cure
- Excellent thermal resistance
- Transparent, colourless

Ideal for bonding:

ABS

Acrylic

Aluminium

EPDM

Mild Steel

Nylon 6

Nylon 6,6

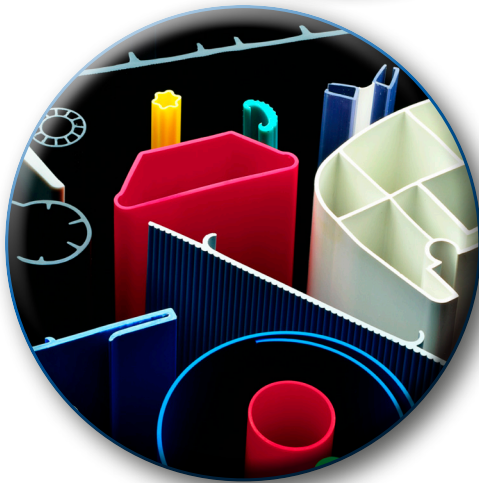
PC

Phenolic

PVC

Rubber

+ many more materials



Permabond® 712 Product data

The following technical data for Permabond 712 is a guideline and does not constitute a specification. For full technical information, please refer to the technical data sheet, available at www.permabond.com.

Our experienced worldwide trained distributor network means no matter where in the world you are located, Permabond representatives can be called upon to assist you with your bespoke applications.

712	
Description	Water & humidity-resistant ethyl cyanoacrylate
Appearance	Transparent
Features	Able to withstand continuous water & moisture exposure once bonded
Viscosity @ 25° C	100 mPa.s
Maximum gap fill	0.15mm
Fixture time	Between 3 and 25 seconds, depending on the substrate
Full strength	24 hours
Service temperature	120°C
Storage Temperature	Between 2 and 7°C
Packaging	20g & 500g bottles

THERMAL AGING		
Adhesion on abraded mild steel	100h at 120°C	80% strength retention
	500h at 120°C	50% strength retention

WATER (CHEMICAL) RESISTANCE		
Adhesion on abraded mild steel	100h at 60°C	95% strength retention
	1000h at 60°C	75% strength retention

HEAT & MOISTURE RESISTANCE		
Adhesion on abraded mild steel	170h at 85°C / 85% RH	90% strength retention

The tables to the left show the shear strength retained after; Thermal Ageing, Water (Chemical) Resistance and Heat & Moisture Resistance, respectively.

The lap shear specimens were all prepared and cured for 72hrs at 23°C, aged at the indicated conditions and tested at 23°C.

With phenomenal performance under extreme conditions, Permabond 712 will stay strong whatever the weather.

Authorised distributor stamp:



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