Permabond[®] ISO 9001 Certified "Our Science ... Your Success" 712 - Water Resistant Cyanoacrylate

Permabond 712 cyanoacrylate adhesive offers 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.

Permabond[®] 712 Features & Benefits

- Bonds withstand water & moisture exposure
- Passes 85°C-85% RH
- Low-viscosity
- Rapid cure
- Bonds well to many substrates
- Excellent adhesion to rubber
- Easy to dispense
- Solvent free
- Great chemical & environmental resistance
- High strength performance
- Easy use no mixing or heat cure
- Excellent thermal resistance
- Transparent, colorless

Ideal for bonding:

ABS Acrylic Aluminum **EPDM** Mild Steel Nylon 6 Nylon 6,6 РС 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.

	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 (cP)	
Maximum gap fill	0.15mm (0.006 in)	
Fixture time	Between 3 and 25 seconds, depending on the substrate	
Full strength	24 hours	
Service temperature	120°C (248°F)	
Storage Temperature	Between 2 and 7°C (35 and 45°F)	

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

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

HEAT & MOISTURE RESISTANCE				
Adhesion on	170h at 85°C /	0.0% strongth rotantian		
abraded mild steel	85% RH	90% strength retention		

The tables to the left show the shear strength retained after; Thermal Aging, Water (Chemical) Resistance and Heat & Moisture Resistance, respectively. The lap shear specimens were all prepared and cured for 72 hours 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.



The information given and the recommendations made herein are based on our experience and are believed to be accurate. No guarantee as to, or responsibility for, their accuracy can be given or accepted, however, and no statement herein is to be treated as a representation or warranty. In every case we urge and recommend that purchasers, before using any product, make their own tests to determine, to their own satisfaction, its suitability for their particular purposes under their own operating conditions. Always refer to current product technical datasheet for most recent and accurate technical information.

Contact us for more information.