Cyberbond

Apollo 2150

TECHNICAL DATA SHEET

Apollo 2150 is a single component, high viscosity cyanoacrylate adhesive with a quicker setting speed than most high viscosity materials. It is suitable for all general-purpose bonding, and is certified to ISO 10993-5 for biocompatibility, making it suitable for use in medical applications.

Physical Properties - Monomer (Uncured)				
Base Compound	Ethyl			
Appearance	Clear			
Viscosity	1800 +/- 300 cPs			
Specific Gravity	1.06 g/cc			
Flash Point	85°C/ 185°F			
Shelf Life	12 mo			
Storage Condition	20°C/ 68°F			
RoHS-Compliant	yes			
Physical Properties - Polymer (Cured)				
Full Cure Time	24 hours			
Appearance	Clear			
Service Temp Range	-55 to 95 °C (-67 to 203 °F)			

Mil-A-46050C, Type II Class III, A-A-3097, Type II Class 3				
Hot Strength (%RT strength, tested at temperature)				
120%				
100%				
80%				
60%				
40%				
20%				
0%				

Specifications and Approvals

0°C

Time Until Full Cure (% of RT strength)

10993-5

-40°C

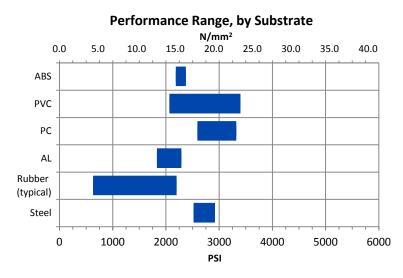
Setting Time		
Steel	40	seconds
ABS	9	seconds
EPDM	10	seconds

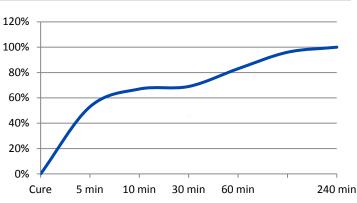
Performance of Cured Adhesive							
Substrate	N/mm²			PSI			
Steel	17.4	to	20.1	2520	to	2920	
Rubber*	4.3	to	15.2	630	to	2200	
AL	12.6	to	15.8	1830	to	2290	
PC**	17.9	to	22.9	2590	to	3320	
PVC**	14.2	to	23.4	2065	to	3400	
ABS**	15.1	to	16.4	2185	to	2375	



^{**}Tested to ASTM 4501

^{***}n/r = not recommended



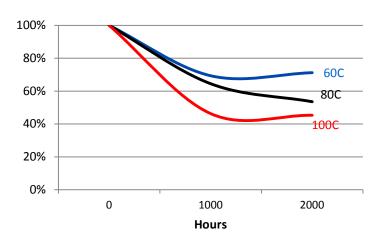


50°C

100°C

130°C

Heat Aging (aged at temp indicated and tested @ 22°C)



Solvent Resistance

Solvent	Example	Resistance	
Alcohol	Ethanol, Methanol	+++	
Ester (aromatic)	Ethylacetate		
Ketone (aromatic)	Acetone, Benzophenone		
Aliphatic			
hydrocarbon	Petrol, Heptanes, Hexane	+ + -	
(alkanes)			
Aromatic	Depart Talval Vulai	+ + -	
hydrocarbons	Benzyl, Toluol, Xylol		
Halogonatod	Mathylanchlarida		
Halogenated	Methylenchloride, Chloroform, Chlorobenzol		
hydrocarbons	Chloroform, Chlorobenzor		
	Nitrite, muriatic acid,	, ,,	
Weak aqueous acid	sulphuric acid, phosphoric	+ + + (if concentrated)	
	acid	concentratedy	
	codium hydroxida	/ :£	
Weak aqueous base	sodium hydroxide	+ + + (if concentrated)	
	solution, caustic potash	concentrated)	

General Instructions

Surfaces to be bonded should be clean and dry. Dispense a drop or drops to one surface only. Apply only enough to leave a thin film layer after compression. Press parts together and hold firmly for a few seconds. Good contact is essential. An adequate bond develops in less that one minute and maximum strength is attained in 24 hours. Wipe off excess adhesive from the top of the container and recap. Apollo products if left uncapped may deteriorate by contamination from moisture in the air. Because Apollo products cure by polymerization, whitening may appear on the surface of the container or the bonded materials. This will not affect adhesive performance.

Curing Performance

Ambient surface moisture initiates the curing process. Handling strength is reached in a short time, and will vary based on environmental conditions, bond line gap, and other factors. Product will continue to cure for at least 24 hours before full strength and solvent resistance is developed.

Storage

Products should be stored unopened in a cool, dry place out of direct sunlight. Products should be kept at room temperature away from direct light. Protect from extreme heat or cold, do not refrigerate.

Note

The data contained herein are furnished for information only and are believed to be reliable. Cyberbond cannot assume responsibility for the results obtained by others over whose method Cyberbond does not control. It is the user's responsibility to determine suitability for the product or of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Cyberbond specifically disclaims all warranties of merchantability or fitness for a particular purpose arising from sale or use of Cyberbond products. Cyberbond specifically disclaims any liability for consequential or incidental damages of any kind, including loss of profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Cyberbond patents which may cover such processes or compositions. We recommend that each prospective user test the proposed application to determine its suitability for the purpose intended prior to incorporating any product or application in its manufacturing process using the data as a guide.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS)

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