

ThreeBond 1739

Cyanoacrylate Instant Adhesive

ThreeBond 1739 is a solvent free cyanoacrylate instant adhesive. It cures instantly at room temperature after assembly. A very small quantity is enough to provide high shear strength on a wide variety of materials.

1. Features

- Cyanoacrylate Ethyl
- One component solvent free
- Moisture curing
- Thixotropic gel
- No flowing
- Service temperature : -40 / +100°C

2. Properties

Before curing

Test	Results	Units
Colour	Transparent	-
Viscosity at 25°C	23 000	mPa.s
Thixotropy index	3.5	-
Setting time - NBR	≤ 80	s

Shear strength

Material	Setting time (s)	Shear strength (MPa)
Steel	30	18.4
Stainless	45	15.3
Aluminium	20	13.0
Copper	10	16.5
Glass	10	*
Hard PVC	20	8.0*
Polycarbonate	20	7.0*
Nylon	20	6.5*
Natural rubber	30	*
NBR	35	*
EPDM	35	*

* Material failure

Curing time and adhesive force

Curing time [h]	1	2	4	8	16	24
Lap shear strength [MPa]	8.5	11.5	14.3	16.3	17.8	18.0

Property change over time

Number of days	10	20	30	40	50	60	
Viscosity (Pa.s)	At 20 rpm	25	25	27	29	29	31
	At 2 rpm	80	80	88	92	91	93
Thixotropy index	3.4	3.2	3.2	3.2	3.1	3.0	
Setting time (s)	35	30	35	40	40	40	
Shear strength (MPa)	160	175	180	180	170	190	

Viscosity - temperature

Temperature (°C)	0	15	25	40	
Viscosity (Pa.s)	at 20 rpm	45	30	23	14
	at 2 rpm	173	112	80	48
Thixotropy ratio	3.8	3.7	3.5	3.4	

3. Handling

- Before use, please refer to the safety data sheet.
- Prior to opening the container, let it reach room temperature to avoid condensation inside.
- To obtain optimal results, remove humidity, grease and other impurities from the surfaces to be assembled.
- Depending on the materials (dimensions and surface roughness), apply an appropriate and uniform amount of liquid gasket on the surface, then assemble rapidly.
- If needed, the use of our activator TB 1796B may reduce the curing time.

Data given here were compiled to the best of our knowledge and are based on experiments and tests of our Company. We cannot guarantee the results obtained through the use of our products, and all products are sold and samples given without any warranty, expressed or implied, of fitness for any particular purpose or otherwise and upon condition that the user shall make his own tests to determine the suitability of the product for his purpose.

- For hard to bond materials (e.g. PE, PP), the use of our primer TB 1797 or TB 7797 may improve adhesion properties.
- The product once transferred into another container should not be returned to the original one. Any excess product should be wiped out using a cloth.
- Excess product may be removed using TB2890D cleaner.
- Keep the glue in its original container tightly sealed and store it in a dark, dry and well ventilated place at **5 ~ 10°C**.