

ThreeBond 7738

Cyanoacrylate Instant Adhesive (Gold Series)

ThreeBond **7738** is a new generation of solvent free one-component cyanoacrylate adhesive. It cures at room temperature after assembly and is designed with a faster setting time than standard types. A very small quantity is enough to achieve high shear strength on most materials such as metals, plastics and woods.

1. Features

- Cyanoacrylate Ethyl
- One component solvent free
- Moisture curing
- Application : Bonding
- Elastomer toughened

2. Properties

Before curing

Test	Results	Units
Colour	Clear yellow transparent	-
Viscosity at 25°C	5000	mPa.s
Thixotropy	5.0	-
Setting time		
NBR	90	sec
Fe	90	
ABS	25	
Setting time with accelerator		
NBR	25	sec
Fe	7	

Shear strength

Materials	Shear strength	Units
Steel	27.7	MPa
Aluminum	21.4	MPa
SUS	17.5	MPa
Brass	26.1	MPa
Copper	18.8	MPa

Materials	Shear strength	Units
Nickel	28.6	MPa
Zinc chromate	8.4	MPa
PVC hard	1.4	MPa
PC	5.4 *	MPa
Phenol	8.5 *	MPa
Nylon 6	5.3 *	MPa
Nylon 6,6	11.6	MPa
ABS	7.6 *	MPa
Glass Epoxy	17.5	MPa
PBT	2.5	MPa
PET	11.5 *	MPa
PPO	4.0	MPa
PPS	3.7	MPa
HIPS	4.0 *	MPa
Acrylic	5.4 *	MPa
Polyacetal	0.5	MPa
NR	0.4 *	MPa
CR	0.6 *	MPa
NBR	0.7 *	MPa
SBR	1.5 *	MPa
EPDM	0.7 *	MPa

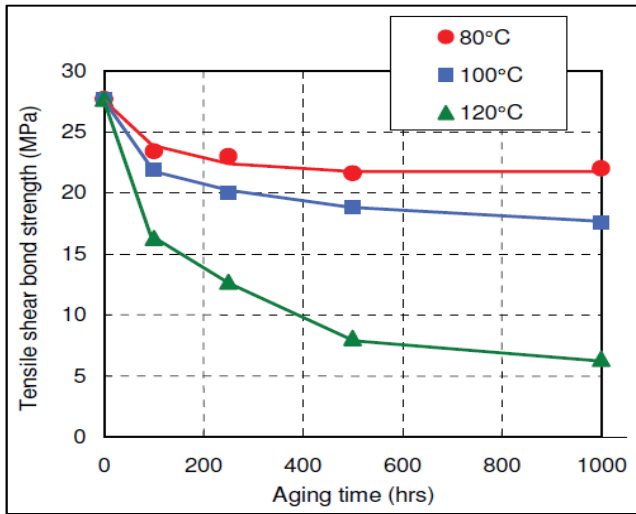
*Material failure

Peel strength and impact resistance

Test	Results	Units
Peel strength		
Fe / Fe	4.2	kN/m
Alu / Alu	2.9	
Impact strength Fe / Fe	34	kJ/m ²

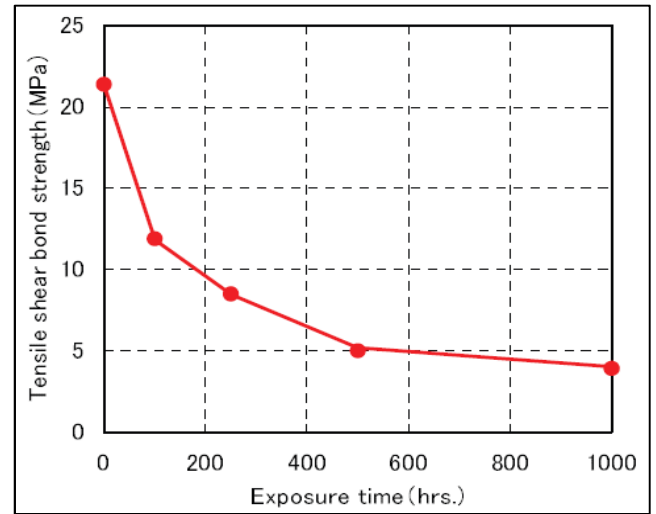
Data given here were compiled to the best of our knowledge and are based on experiments and tests of our Company. We cannot guarantee the results obtained through the use of our products, and all products are sold and samples given without any warranty, expressed or implied, of fitness for any particular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

Heat resistance

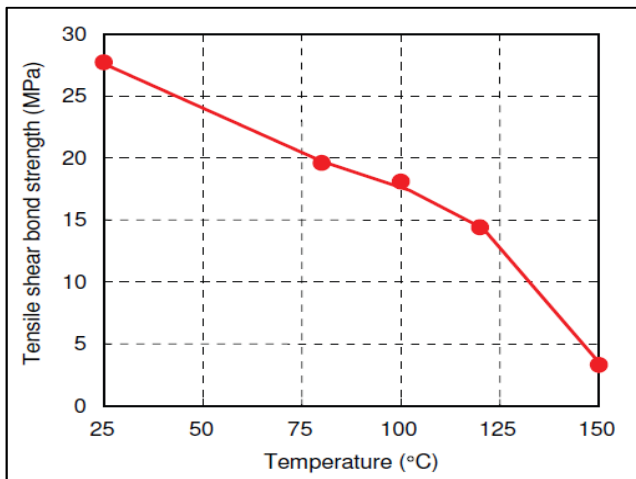


Fe / Fe, measured at RT

Moisture resistance

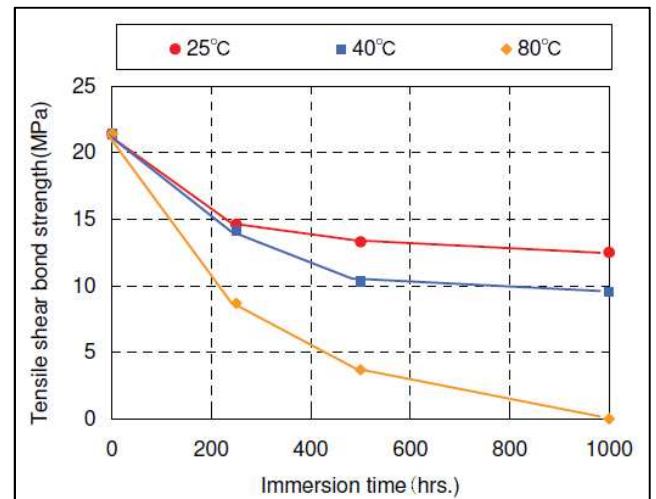


Alu / Alu, 85°C, 85%RH



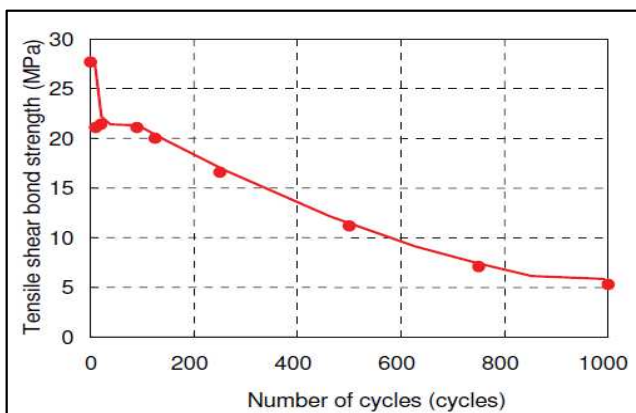
Fe / Fe

Water resistance



Alu / Alu, Immersed in water, measured at RT

Heat cycle resistance



Fe / Fe, cycle = -40 / +120°C 1h each

Chemical resistance

Test	Conditions	Shear strength (MPa)
Initial	-	27.7
Isopropyl alcohol	25°C x 250h	28.8
Toluene	25°C x 250h	28.2
Essence	25°C x 250h	21.0
Engine Oil	40°C x 250h	27.5
Coolant (50% water)	25°C x 250h	25.6

Fe samples immersed in the chemical listed above

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.

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.
- 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 product in its original container tightly sealed and store it in a dark, dry and well ventilated place at **5 ~ 10°C**.