



Three Bond International, Inc.

Technical Data Sheet

TB1731 **HIGH PEEL STRENGTH, IMPACT RESISTANT CYANOACRYLATE ADHESIVE**

Information

TB1731 is a high peel strength, impact resistant cyanoacrylate adhesive. It bonds well to rubber substrates and also bonds well at low temperatures. It is moisture resistant and is suitable for a large bonding area. The main components are an -cyanoacrylate and an elastomer.

Application

TB1731 can be used for bonding speaker frames and magnets, coil terminals, insulators, O-rings and rubber parts.

Typical Properties

1. Uncured State

Properties	Units	Value
Appearance	-	Light yellow
Viscosity	mPa • s (cP)	20 (20)
Set time NBR/NBR	Second	60
Set time Steel/Steel	Second	30

2. Cured Material

2-1. Lap shear strength (metal substrate)

Substrate	Units	Value
Steel/Steel	MPa(kgf/cm ²)	20.0(200)
Aluminum/Aluminum		11.0(110)
Stainless Steel/Stainless Steel		17.0(170)
Copper/Copper		14.0(140)
Brass/Brass		9.0(90)

2-2. Lap shear strength (Plastic substrate)

Substrate	Units	Value
Hard type PVC/ Hard type PVC	MPa(kgf/cm ²)	1.0(10)
Polycarbonate/ Polycarbonate		MF
Phenol resin/ Phenol resin		MF
6-nylon/6-nylon		3.8(39)
6,6-nylon/6,6-nylon		Material Failure
ABS/ ABS		Material Failure
Glass epoxy/ Glass epoxy		10(100)
PBT/PBT		0.8(8)
PPO/PPO		2.9(30)
Polyethylene/ Polyethylene		0.4(4.0)
Polypropylene/ Polypropylene		0.2(2.0)
Acryl/ Acryl		MF
Polyacetal/ Polyacetal		0.9(9)
Polystyrol/ Polystyrol		2.4(24)

2-3. Lap shear strength (Rubber substrate)

Substrate	Units	Value
NR/NR	MPa(kgf/cm ²)	Material Failure
CR/CR		Material Failure
NBR/NBR		Material Failure
SBR/SBR		Material Failure
EPDM/EPDM		Material Failure

2-4. Lap shear strength (Fe/rubber substrate)

Substrate	Units	Value
Steel/NBR	MPa(kgf/cm ²)	Material Failure
Steel/SBR		Material Failure
Steel/NR		Material Failure
Steel/CR		Material Failure
Steel/EPDM		Material Failure

2-5. Peel strength (90 , T-peel)

Substrate	Units	Value
Steel/Steel	kN/m (kgf/25mm)	3.0(8.0)
Aluminum/Aluminum		2.0(5.0)
Copper/Copper		0.4(1.0)
Stainless Steel/Stainless Steel		1.4(3.5)
Brass/Brass		0.1(0.3)
NBR/NBR		Material Failure
SBR/SBR		Material Failure
NR/NR		Material Failure
CR/CR		Material Failure
EPDM/EPDM		Material Failure

2-6. Peel strength (180)

Substrate	Units	Value
Steel/NBR	kN/m (kgf/25mm)	Material Failure
Steel/SBR		Material Failure
Steel/NR		Material Failure
Steel/CR		Material Failure
Steel/EPDM		Material Failure

2-7. Impact strength

Substrate	Units	Value
Steel/Steel	kJ/m^2 (kgf cm/cm ²)	34(35)

These are typical results not product specifications.