

TECHNICAL DATA SHEET



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Three Bond 1786S Cyanoacrylate Adhesive

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Product Outline

Three Bond 1786S is a solventless one component high performance industrial grade cyanoacrylate adhesive. It hardens in seconds at room temperature and demonstrates strong bonds to metals, most plastics and rubbers.

Properties of Uncured Material

Properties	Results	Units
Type	Ethyl	
Colour	transparent	
Viscosity at 25°C	100	mPa.s
Density at 25°C	1.07	g/cm ³
Set time (23°C x 50 % RH) Nitrile rubber	< 12	s
Shelf life at 20°C	12	Months

Properties of Cured Material

Properties	Results	Units
Shear strength Mild steel	9	MPa
Effective temperature range	- 50 ~ +85	°C
Maximum temperature	120	°C
Volume resistivity	>	Ω.m

Packaging

20g,50g,500g,20kg plastic bottle.

Directions For Use

- Danger! Bonds skin and eyes in seconds.
- Keep the product in its original container, tightly closed and store it in a dark, dry, sufficiently ventilated and cool place at 5 ~ 25°C.

- For optimum bonding remove grease, dirt and other impurities from the fitting faces with for example alcohol, acetone or MEK.
- The best results are obtained when bonding the parts at 23°C 40 ~ 80 % RH. A lower humidity slows the curing process, a higher humidity accelerates the curing process but can weaken the bond strength by 10 ~ 15 %. Acidic fitting surfaces (pH-Value < 7) can delay thorough curing whilst alkali surfaces (pH-Value > 7) accelerates the polymerisation.
- In the case of difficult to bond substrates, apply Primer Three Bond 1797 on the fitting faces and allow to dry (adhere within 1h).
- In the case of difficult bonding conditions where cure speed is long due to large gaps or low relative humidity, apply Activator Three Bond 1796B on one of the fitting faces and allow to dry (adhere within 1h).
- Apply a thin coat of adhesive on one of the fitting faces (≈ 5 mg/cm²) and join the parts immediately, position correctly and fix them under slight pressure.
- In the case of thick sections, ensure complete curing by the subsequent application of Activator Three Bond 1796B directly on the cyanoacrylate adhesive.
- In order to prevent premature ageing of the adhesive it should not be stored below -5°C or together with water, alcohol, amines, alkalis or dioxides.
- Excess adhesive should be immediately wiped off with a cloth. Cured cyanoacrylate adhesive can be removed by repeated coating with Remover Three Bond 17F-024.

Accessories

	Remover	Activator	Primer
	TB17F-024	TB1796B	TB1797
Type	Nitroethane Ethanol	Isopropyl- Alcohol	Acetone, Methanol
Colour	Transparent	Transparent	Transparent
Viscosity mPa.s	2.50	0.90	0.85
Density [g/cm ³]	0.99	0.79	0.80
Flash point °C	26	21	-9.5
Shelf life at 5°C	12 months	9 months	9 months
Packing units	100ml. 51	100 ml. 51	100 ml

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