



## TECHNICAL DATA

# ZYROBOND®

CA 3496

## Cyanoacrylate Adhesive

CA 3496 is a medium viscosity Cyanoacrylate Adhesive with an excellent cure speed.

CA 3496 is specifically formulated for bonding metal to metal, metal to rubber and metal to plastics.

### APPLICATIONS:

■ Steel	■ Aluminium	■ Stainless Steel	■ Zinc Dichromate
■ Neoprene	■ Nitrile Rubber	■ Buna N Rubber	■ Polyamide
■ ABS	■ PVC	■ Polycarbonate	■ Polyimide

### TECHNICAL DATA:

#### Adhesive Properties:

Chemical Basis:	Methyl Cyanoacrylate
Appearance:	Clear Liquid
Viscosity: (Brookfield LVF, Spindle 1 @ 30rpm)	100 – 150 cps @ 25°C
Specific Gravity:	1.10
Flash Point:	80°C - 93°C

#### Curing Properties: (after 24 hours at 25°C)

Tensile Shear Strength:	18 – 30 N/mm <sup>2</sup>	ASTM D 1002, DIN 53283
Shear Strength: (sand blasted steel)	> 25 N/mm <sup>2</sup>	ASTM D 1002, DIN 53283
Shear Strength: (etched aluminium)	> 20 N/mm <sup>2</sup>	ASTM D 1002, DIN 53283
Shear Strength: (Zinc Dichromate)	> 10 N/mm <sup>2</sup>	ASTM D 1002, DIN 53283
Shear Strength: (Rubber)	> 15 N/mm <sup>2</sup>	ASTM D 1002, DIN 53283
Shear Strength: (ABS)	> 14 N/mm <sup>2</sup>	ASTM D 1002, DIN 53283
Shear Strength: (PVC)	> 10 N/mm <sup>2</sup>	ASTM D 1002, DIN 53283
Shear Strength: (Polycarbonate)	> 13 N/mm <sup>2</sup>	ASTM D 1002, DIN 53283
Melting Point Temperature:	160 - 170°C	
Final Cure:	24 Hours	
Gap Fill:	0.20 mm	
Temperature Resistance:	-53 to +82°C	

#### Typical Cure Speed:

Fixing Time: (steel)	20 – 40 sec.
Fixing Time: (aluminium)	30 – 60 sec.
Fixing Time: (zinc dichromate)	30 – 60 sec.
Fixing Time: (rubber)	> 10 sec.
Fixing Time: (polycarbonate)	10 – 25 sec.
Fixing Time: (ABS)	30 – 70 sec.
Fixing Time: (PVC)	20 – 70 sec.



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#### Physical and Electrical Properties:

Glass Transition Temperature:	165°C	ASTM E228
Coefficient of Thermal Expansion:	80x10 <sup>-6</sup>	ASTM D696 K-1
Dielectric Strength:	27 kV/mm	ASTM D149
Coefficient of Thermal Conductivity:	0.1 W.m <sup>-1</sup> K <sup>-1</sup>	ASTM C177
Volume Resistance:	n.a.	ASTM D257
Dielectric Constant:	2.7 @ 25°C	ASTM D150

#### Chemical Resistance:

Medium	Temperature	% Initial Strength Retained	
		500 Hours	1000 Hours
Isopropanol:	22°C	85	85
Petrol:	22°C	80	75
Motor Oil:	40°C	90	90
Mineral Spirit:	22°C	90	90

#### Instructions for Use:

Surfaces should be dry, clean, and free of any contamination. Best result will be achieved with surfaces that have been lightly abraded immediately prior to bonding. If using accelerator apply to one component surface only. Apply thin film of adhesive to the other surface and bring the pieces together immediately. Hold for few seconds without disturbing the joints. When bonding "O" rings, cut a fresh surface onto each end of the rubber to gain the best possible strength.

**Bonding Times:** Under normal conditions, the surface moisture initiates the curing process. Functional strength developed very quickly but curing process continues for at least 24 hours before full chemical/solvent resistance is developed. The rate of cure will depend on substrate used.

**Storage:** Cyanoacrylate adhesives shall be ideally stored in a cool, dry place in unopened containers. For long term storage cyanoacrylate adhesives should be refrigerated or stored at temperatures below 46°F/8°C. The shelf life (stored at room temperatures) can be up to 1 year (modified cyanoacrylates 9 Months). If refrigerated, cyanoacrylates can remain within specifications for up to 2 years (modified cyanoacrylates 1 year).

**General information:** The information contained herein serves merely as an indication and is given to the best of knowledge. The users must test the suitability of the product for her/his/their respective application independently however. All products purchased from or supplied by Nohtec are subject to terms and conditions set out in the contract. Nohtec warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Nohtec is considered accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Nohtec makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will infringe any patent.