

TECHNICAL DATA SHEET FOR PROCURE PC1473

TYPICAL APPLICATIONS

PC 1473 is specially formulated to provide a more flexible bond than standard cyanoacrylates. PC 1473 can be used up to 105°C and has intermittent temperature resistance up to 125°C. PC 1473 can be used to bond a wide variety of substrates including metals, plastics, rubbers, etc. PC 1473 can be used on PCB's to provide strain relief for large components

PRODUCT DESCRIPTION

PC 1473 is a high viscosity, black rubber-toughened cyanoacrylate adhesive. PC 1473 displays excellent peel and impact strength and is well suited to applications involving vibration, thermal shock, temperature cycling and high humidity

PROPERTIES OF UNCURED MATERIAL

| | | |
|-----------------------------|----------|----------------|
| Chemical type | | Modified ethyl |
| Appearance | | Black |
| Specific Gravity | | 1.1 |
| Viscosity cPs ¹ | | 4000-7000 |
| - range @2.5rpm | | 1,000-3,000 |
| - range @20rpm | | |
| Fixture Time | (secs) | 20 , 90 |
| Full Cure | (hours) | 24 |
| Flash Point | (°C) | > 85 |
| Shelf Life @ 5°C | (months) | 6 |
| Max Gap Fill | (mm) | 0.2 |
| Operating Temperature Range | (°C) | -50 to +105 |
| Intermittent exposure | (°C) | -50 to +125 |

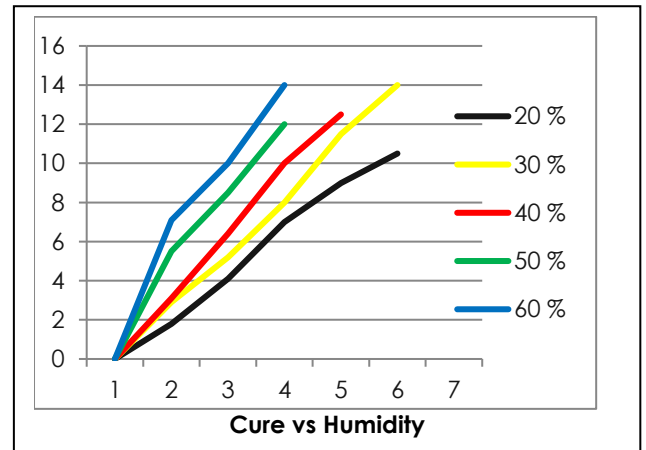
TYPICAL CURING PERFORMANCE

Typical Speed:

| | |
|---------------|-------------|
| Steel/steel | <70 seconds |
| ABS/ABS | <50 seconds |
| Rubber/Rubber | <40 seconds |

CURE SPEED VS. ENVIRONMENTAL CONDITIONS

Cyanoacrylates require surface moisture on the substrates in order to initiate the curing mechanism. The speed of cure is reduced in low-humidity conditions. Low temperatures will also reduce cure speed. All figures relating to cure speed are tested at 21°C.



CURE SPEED VS.SUBSTRATE

The speed of cure of Cyanoacrylates varies according to the substrates to be bonded. Acidic surfaces such as paper and leather will have longer cure times than most plastics and rubbers. Some plastics with very low surface energies, such as polyethylene, polypropylene and Teflon® require the use of Procure 77 Primer (See PC 77 TDS for further info).

CURE VS.ACTIVATOR

Activators 780 and 750 may be used in conjunction with cyanoacrylates where cure speed needs to be accelerated.

Cure speeds of less than 2 seconds can be obtained with most cyanoacrylates.

The use of an activator can reduce the final bond strength by up to 30% Testing on the parts to measure the effect is recommended.

Cure speed vs. bond gap

PROCURE/REACT Cyanoacrylates give best results on close fitting parts. The product should be applied in a very thin line in order to ensure rapid polymerisation and a strong bond. Excessive bond gaps will result in slower cure speeds. PROCURE / REACT Cyanoacrylate Activators may be used to greatly increase cure speeds (See PC780 and PC750 TDS for further info).

CYANOTECH LTD

Bay 2, Building 62, Third Avenue, Pensnett Trading Estate, Kingswinford DY6 7XT
 TEL 0845 618 3120 FAX 0845 618 3121 EMAIL sales@cyanotec.com

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V1.4
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TYPICAL ENVIRONMENTAL RESISTANCE HOT STRENGTH

PC 1473 cyanoacrylate adhesive is suitable for use at temperatures up to 105°C continuously, intermittently up to 125°C. At 105°C the bond will be approximately 40% of the strength at 21°C

Chemical / Solvent Resistance

Cyanoacrylates exhibit excellent chemical resistance to most oils and solvents including motor oil, leaded petrol, ethanol, propanol and freon.

Cyanoacrylates are **not** resistant to high levels of moisture or humidity over time.

STORAGE

Store in a cool area out of direct sunlight. Refrigeration to 5° C gives optimum storage stability.

REMOVAL OF CURED CYANOACRYLATE

Cured cyanoacrylate may be removed from most substrates, and parts disassembled, with a debonder.

It is not possible to fully remove cyanoacrylate from fabrics

PRESENTATION

Cyanoacrylates are supplied in 20g, 50g, 500g and bulk packs

DIRECTIONS FOR USE

Bond speed is very fast so ensure that parts are properly aligned before bonding.

Activators may be required if there are gaps or porous surfaces. Some plastics may require application of primer.

Ensure parts are clean, dry and free from oil and grease.

Product is normally hand applied from the bottle. Apply sparingly to one surface and press parts firmly together until handling strength is achieved. As a general rule, as little cyanoacrylate as possible should be used – over application will result in slow cure speed and lower bond strength.

Please contact your representative for further advice on dispensing solutions.

GENERAL INFORMATION

For safe handling of this product consult the Material Safety Data Sheet.

NOTES AND DISCLAIMER

The information contained herein is produced in good faith and is believed to be reliable but is for guidance only. CYANOTECH Ltd. and its agents cannot assume liability or responsibility for results obtained in the use of its product by persons whose methods are outside or beyond our control. It is the user's responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore the user's responsibility to observe and adapt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.

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