Permabond C737 Cyanoacrylate Adhesive Technical Information Sheet



Description:

Permabond Black Magic C737 is a toughened cyanoacrylate with improved impact and peel strength for maximum flexibility. Its increased temperature resistance and dark colour make Black Magic suitable for a wide range of applications. It bonds rapidly to a variety of surfaces including aluminium, steel (both zinc plated and uncoated), plastics and rubbers.

Physical Properties*

Colour	black
Viscosity (mPa.s) * T = Thixotropic	3000
Specific Gravity	1.1
Tensile Strength (MPa)	25
Maximum Gap Fill (mm)	0.5
Chemical Type	Ethyl
	Cyanoacrylate

Cure Speed*

Handling Strength 20-50 secs.

Full Strength 24 hrs.

This is a typical cure speed to be expected on most rubber and plastic surfaces. The actual handling times can be affected by temperature, humidity and the specific surfaces being bonded. Larger gaps, or acidic surfaces, will also reduce the cure speed but this can be overcome by the use of **Permabond C Surface Conditioner (CSA).**

Storage:

When stored in the original unopened containers between 5 and 7°C, the shelf life of this product is 6 months from the date of despatch from Permabond.

Product stored in a 'fridge should be allowed to warm up to room temperature before opening to prevent condensation causing premature hardening of the adhesive.

Service Temperature:

The recommended service temperature range for this product is -40 to +120°C. However higher temperatures may be endured for short periods providing the adhesive is not unduly stressed.

Handling:

Cyanoacrylate adhesives will bond skin and eyes in seconds. Contact with skin and eyes should be avoided. Use in a well ventillated area. Full information can be obtained from the Material Safety Data Sheet (MSDS).

Directions for Use:

The surfaces to be bonded should be clean and free from oil or grease. The use of **Permaclean II** or other organic solvents such as Acetone or Methyl Ethyl Ketone (MEK) is recommended. Persistent contamination should be removed by abrasion prior to degreasing.

Apply the adhesive sparingly to **one** surface and bring the components together quickly whilst ensuring they are correctly aligned

Squeeze the parts together with sufficient pressure to ensure the adhesive spreads to cover the surfaces. Do not disturb or realign the joint until the adhesive has reached handling strength.

Shake product every 20 days to maintain optimum characteristics

^{*} Values shown are typical and should not be used for specification writing purposes. Please contact Permabond for assistance in writing specifications covering Permabond products.

Additional Products in the Permabond Range



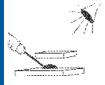
Toughened Acrylics

For structural bonding of engineering materials, such as metal, glass, ceramic and reinforced plastic, where high stress may be encountered. Often used to replace traditional jointing methods such as riveting and welding

Epoxy Resins

Single part epoxies for maximum performance, chemical and temperature resistance. Two part epoxies for versatility, as a wide variety of materials can be bonded. Particularly suitable where large surface areas or large gaps need to be filled.





UV Curing

A range of adhesives specially developed for a wide selection of glass bonding and electronic assembly applications.

Metal Repair

For the repair of holes and cracks etc., in metalwork. Particularly useful for reclaiming damaged pipes, castings, flanges or metallic vessels.





Anaerobics

For locking and sealing of metal parts, replacing traditional time consuming and expensive techniques. Typical applications include threadlocking, pipesealing, gasketing and retaining.

Cyanoacrylates

For rapid bonding of many different materials including plastics and rubbers, helping to speed up production lines or reduce maintenance down time.



Disclaimer: NATIONAL STARCH & CHEMICAL COMPANY (PERMABOND) MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF THESE MATERIALS FOR USE IN IMPLANTATION IN THE HUMAN BODY, OR FOR ANY OTHER USE. These materials are not designed or manufactured for use in implantation in the human body. National Starch has not performed clinical testing of these materials for implantation. National Starch has neither sought, nor received, approval from the FDA for the use of these materials in implantation in the human body.

Non-Warranty: The information given and the recommendations made herein are based on our research and are believed to be accurate but no guaranty of their accuracy is made. In every case we urge and recommend that purchasers before using any product in full scale production make their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purposes under their own operating conditions. THE PRODUCTS DISCLOSED HEREIN ARE SOLD WITHOUT ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULARPURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.

No representative of ours has any authority to waive or change the foregoing provisions but, subject to such provisions, our engineers are available to assist purchasers in adapting our products to their needs and to the circumstances prevailing in their business. Nothing contained herein shall be construed to imply the non-existence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of this patent. We also expect purchasers to use our products in accordance with the quiding

principles of the Chemical Manufacturers Association's Responsible Care® program.

TDS04/01

