

# Cyberbond CB

#### **RM 80**

#### **Technical Datasheet**

Profile:

Retainer: High strength, medium viscosity, thixotropic

Anaerobic adhesive for threads and dynamic loaded cylindrical parts like bearings, studs, rotors etc. RoHS compliant.

#### Physical properties - monomer

Base compound Dimethacrylate

**Appearance** Green

Gap filling capacity 0,05 - 0,15 mm

Fluorescent No

Density at 20 °C 1,07 g/cm<sup>3</sup>

Shelf life at 20 °C in

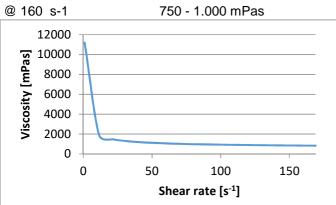
unopend bottles 12 months M 20 Maximum thread

#### **Viscosity**

Cone / Plate, measured

at 20 °C

@ 0.5 s-1 7.000 - 20.000 mPas



#### **Physical properties - Polymer**

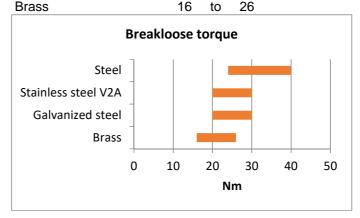
Full cure time [hours] 24 Green **Appearance** 

Temperature range -50 - 180 °C

#### Setting time at 23 °C

M10 brass bolt/nut 10 - 30 seconds

| Adhesive strength   |    |    |    |  |
|---------------------|----|----|----|--|
| Substrate           |    | Nm |    |  |
| Steel               | 24 | to | 40 |  |
| Stainless steel V2A | 20 | to | 30 |  |
| Galvanized steel    | 20 | to | 30 |  |
| Drace               | 40 | 4  | 20 |  |



Breakloose torque on M10 bolts and nuts in Nm according to DIN 54454, free swimming without ontorque.

#### Shear strength

Steel pin/collar specimen,

after 24 h 24 - 44 N/mm<sup>2</sup>

#### Safety Information for Anaerobic **Adhesives**

Please consult the MSDS (Material Safety Data Sheet) before using. Keep the workplace clean and use in well ventilated areas only. Install suitable exhaust system at the workplace. Wear suitable safety glasses and gloves.

IATF 16949, ISO 13485, ISO 9001 & ISO 14001 Cyberbond CB

12.10.2020 / RM 80

| Solvent resistance      |   |                 |  |  |  |
|-------------------------|---|-----------------|--|--|--|
| <b>Solvent</b> alcohols | Example ethanol, methanol, isopropyl alcohol  | Resistance<br>+ |  |  |  |
| esters                  | ethylacetate,<br>benzoic benzyl ester   | +               |  |  |  |
| other liquids           | water, freon, diesel oil  | +               |  |  |  |
| other liquids           | ammonium hydroxide, bromine, chlorine, hydrobromic acid, lithium hydroxid, perchloric acid, potassium hydroxide | -               |  |  |  |
| gases                   | acetylene, argon,<br>butane, ethane,<br>nitrogen  | +               |  |  |  |
| gases                   | ammonia, freon<br>gas, oxygen (pure<br>and /or oxygen rich<br>systems)  | -               |  |  |  |

### **General Information about Anaerobic Adhesives**

Anaerobic adhesives and sealants cure by means of metal contact and/or due to the absence of air. Due to these facts they are only suitable for bonding and sealing metals. Therefore, as such they are not traditional adhesives as commonly known, but are specifically good for the bonding of metal cylindrical parts where torsion-load and shearing-load play an important part. Furthermore, anaerobics are excellent sealants for threads and flanges. Anaerobis are solvent free, one component adhesives.

There are active metals (construction steel, tool steel, free cutting steel, brass, copper) and inactive metals (high alloyed or stainless steel, aluminium, electroplated surfaces, cast iron). While products used on active metals cure very fast, the same products need longer times to cure when used on inactive metals. But this does not influence the intended strength.

#### **LINOP Equipment**

Cyberbond offers by means of the LINOP Equipment range suitable dosing and LED based curing devices. We also refer to suitable dosing tips which help an economical use of the adhesives (also if used manually).

#### Measurement of Viscosity

Viscosity describes the flow-ability of a liquid. Cyberbond measures the viscosity of the products by means of the cone/plate method: the liquid is applied on a panel and a defined cone presses the liquid together and rotates. You differentiate between a Newtonian and a thixotropic liquid. In terms of a Newtonian liquid you will get a relative constant viscosity graph in dependence of the rotary speed of the cone. In terms of thixotropic liquids the product becomes more liquid (down to its base viscosity) the faster the cone rotates. The viscosity is measured in mPa\*s.

#### **Clean Surface**

The surface condition of the mating parts has an enormous influence on the success of a bond. To achieve good bonding success the mating parts should be clean. A certain amount of e.g. oil can be tolerated.

#### **Additional Programme**

In order to support certain applications Cyberbond offers perfectly balanced additional products such as:

- Activator: in order to accelerate the curing of adhesives (Standard: CB 9191)
- Cleaner: in order to clean surfaces professionally (Standard: CB 9999)

#### **Storage**

Store products in a cold and dark place. Optimal storage temperature range is between 8 °C - 21 °C.

The data mentioned in this TDS, particularly the recommendations and use of products are based on our recent knowledge and experience. Due to the fact of having so many different materials involved and conditions of applications which are out of our influence, we strongely recommend to do sufficient tests in order to guarantee that Cyberbond products are suitable for the intended process and applications. Exept for wilful acts any liability based on such recommendations or any verbal advice is hereby expressly exluded.

## For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Cyberbond Europe GmbH
A H.B. Fuller Company
Werner-von-Siemens-Straße 2
31515 Wunstorf
Germany

Tel.: +49 / 50 31 / 95 66 - 0 www.cyberbond.de





IATF 16949, ISO 13485, ISO 9001 & ISO 14001 Cyberbond CB