



CB 2250

Technical Datasheet

- xtraflex Series
- fast bonding
 - high viscosity
 - partly flexible
 - yellowish

The xtraflex Series stands for partly flexible Cyanoacrylates, also known as rubber toughened. They allow dynamic and temperature loaded bonds and guarantee certain shock absorbance properties. These grades are also excellent for combination bondings like metal to rubber or metal to plastic.

Storage Conditions: +5°C - +20°C / 41°F - 68°F (recommended: use of refrigerator). Before opening the bottle the adhesive should be reconditioned to room temperature (at minimum higher than actual ambient dew point).

Working range: best results can be achieved when adhesive and substrates have been reconditioned above dew point and relative humidity is 30 - 80%.

Different Application Parameters: At higher humidity the substrates should be heated beyond the ambient temperature by 10 K (for large components in the local area of adhesive surface), unless there are no possibilities to create the recommended conditions.

CB 2250 is an exclusive product and can only be purchased by Continental Trading GmbH.

Physical properties - monomer (uncured)

Base compound	Ethyl-2-cyanoacrylate
Appearance	yellow, fluorescent
Density at 20 °C in g/cm ³	1,06
Flashpoint	85
Shelf life, 20 °C, unopened, in months	12

Viscosity

cone-plate, @20°C [CBE PA-035]	
@ 160 rpm	1500-3500 cps

Physical properties - Polymer

Appearance	yellowish
Service temp range	-55 - 140 °C
humidity range	< 98%
relative humidity at	+20°C

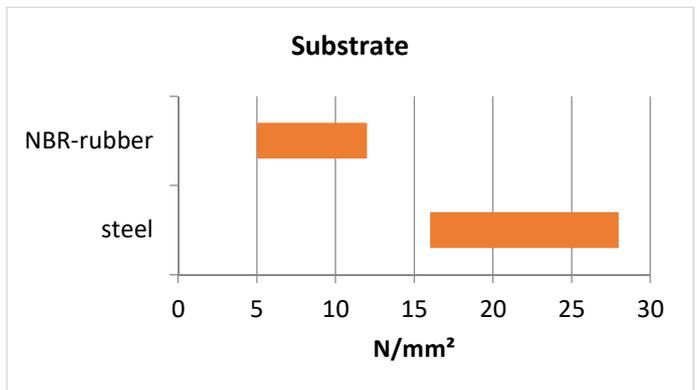
Setting time [seconds]

metal (steel)	30 - 90
EPDM	8 - 17
plastic (ABS)	7 - 13

Strength of cured adhesive

Substrate	N/mm ²
NBR-rubber ▲	5 to 12
steel	16 to 28

▲ material failure



Specification

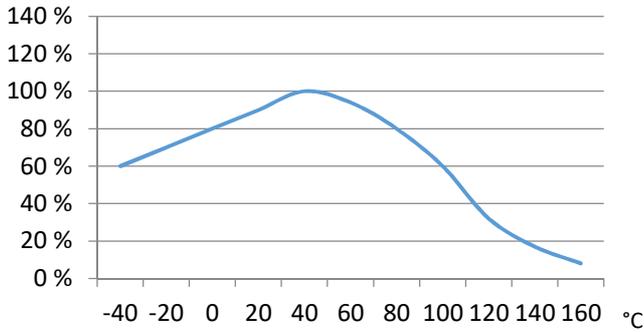
RoHS conform.

For details and certificates see www.Cyberbond.eu

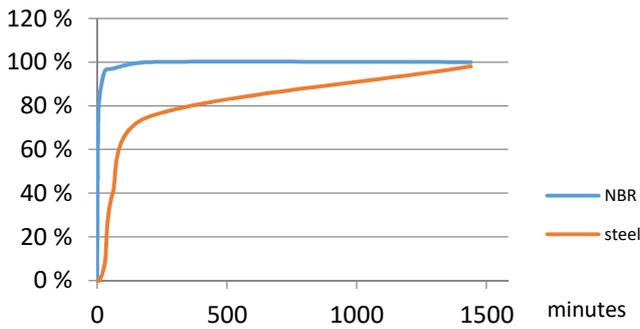


Hot Strength on steel

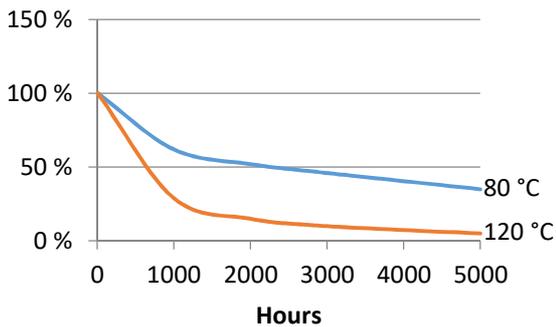
% of RT strength, tested at temperature



Time Until Full Cure % of RT strength



Heat Aging - on steel tested @ 20°C



Durability after Alternating Climate Storage

Conditions; tested with stainless steel

above freeze point 80% rel. humidity

temperature range: -20 - 80 °C

Cycle count

60

[h]

Holding time at start temperature

0

Heating up phase

3

Keeping warm phase

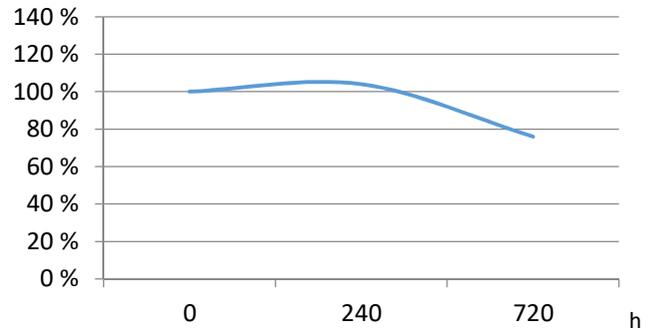
3

Cooling down phase

3

Holding time at final temperature

3



**Solvent resistance**

Solvent	Example	Resistance
alcohol	ethanol, methanol	+++
ester (aliphatic)	ethyl acetate (acetic acid ethyl ester)	---
ketones	acetone, benzophenone	---
aliphatic hydrocarbons (alkanes)	petrol, heptane, hexane	++
aromatic hydrocarbons	benzene, toluene, xylene	++
halogenated hydrocarbons	methylene chloride, chloroform, chlorobenzene	---
weak aqueous acids	diluted nitric-, muriatic-, sulfuric-, phosphoric acid	+++
concentrated acid	nitric acid, muriatic acid, sulfuric acid, phosphoric acid	---
weak aqueous bases	diluted sodium hydroxide -, caustic potash solution	+++
concentrated bases	sodium hydroxide -, caustic potash solution	---
water		++
Liquidow(TM) CaCl2 Solution		---
Tech: RimEase(TM) 720		---
Tire Life (R)		---
Tire tech mounting fluid		---
Tech: Tech Tire Mounting Paste		---
AGS: RU-Glyde		---
Freylube: Freylube Prema		---
Patch Rubber Co.: Slip Tac		---
Myers Tire Supply: Patch Tire Lube Concentrate		---
Gaither Tool Co.: Super Slick-Em		---
A-1 Tire: Cody's Tire Snot		---

+++ very good ++ good --- very bad

Solvent resistance

Solvent	Example	Resistance
Rema Tip Top: Hunter		---
Tire Mounting Paste		

+++ very good ++ good --- very bad

General Information CA

Cyanoacrylates are fast setting, one component and solvent free adhesives. They are based on esters of cyanoacetic acid. To get to a finished product, mainly thickeners, respectively film forming agents (polymer methacrylics and acrylics) and stabilisers are added. The polymerization is initiated by present humidity. Best results are given between 40 to 70 % relative humidity.

Cyberbond standard grades are as follows:

- Powerdrop series (stabilised ethyl ester)
- Elastomer and plastic series (ethyl ester)
- Neomer Series (surface insensitive ethyl ester)
- xtraflex series (rubber toughened ethyl ester)
- metal series (ethyl ester)
- low odour series (alkoxy ester)
- medical series (butyl- and octyl ester)

Measurement of Viscosities

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 (milli Pascal x second) [SI system] or in cP (centipoise) [CGS- system]; 1 mPa*s = 1 cP.

In order to allow products comparison all adhesives are measured at the same rotation speeds.

- Newtonian liquids at 160 rpm
- Thixotropic liquids at 0,5 rpm and at 160 rpm

Temperature always is at 20 °C / 68 °F, if not mentioned to be different.

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.



Additional Programme

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

- Primer and Conditioner Pen: in order to change surface tension; enables to bond unpolare materials (Standard: CB 9056)
- D-Bonder: in order to dissolve adhesives (Standard: CB 9060, CB 9065, CB 9066)
- Activator: in order to accelerate the curing of adhesives (Standard: CB 9090, CB 9096, Quickstep 9040, Quickstep 9080)
- Cleaner: in order to clean surfaces professionally (Standard: CB 9999)

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).

Potential Danger of Cyanoacrylates

You should care for the following:

- use in well ventilated areas only
- install suitable exhaust systems in the workshop
- apply material economically and use a dosing system where appropriate
- allow a consistent relative humidity of 50 to 65 %; with regards to lower figures the polymerization will be delayed and monomer adhesive fume will appear
- if necessary: wear suitable, non-sucking gloves (e.g. no cotton)
- keep adhesive out of reach of children

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 strongly recommend to do sufficient tests in order to guarantee that Cyberbond products are suitable for the intended process and applications. Except for wilful acts any liability based on such recommendations or any verbal advice is hereby expressly excluded.

Storage

Store products in a cold and dark place. Before use allow to reach ambient temperature.

For safe handling consult Material Safety Data Sheet (MSDS).

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