



COSMO® CA-500.140

***COSMOPLAST 516

Cyanoacrylate - Fast-Setting Adhesive

Examples for Application

- Electrical / electronic industry
- EPDM seals in window, façade, and vitrine construction
- Vehicle / shipbuilding
- Household appliances production
- Metal construction / technical industrial supplies
- Toy industry
- Clocks / jewellery / optical systems / prize cups

Special Properties

- Good adhesion characteristics to different surfaces
- Solvent-free
- Good wetting of the substrate
- hard adhesive joint
- Good UV-stability

Technical Data

Basis	Modified cyanoacrylates
Viscosity as per cone and plate (300 s ⁻¹) at +25 °C	approx. 1 000 mPa.s
Density as per EN 542 at +20 °C	approx. 1.05 g/m ³
Functional strength EPDM/EPDM - profile sealing	approx. 20 s
Functional strength Alu/Alu	approx. 100 s
Gap bridging	max 0.1 mm
Curing time at +20 °C, 50 % r. H.	approx. 16 h
Softening range	from +80 °C
Processing temperatures adhesive and substrates	from +5 °C to +30 °C

General Information

In principle, CA-adhesives cure by means of air and material humidity. This means that ambient conditions, material and condensation humidity on the surfaces to be glued, thickness of applied adhesive layer and press power, as well as surface roughness of the materials to be glued significantly influence the process.

The chemical characteristics of the surfaces to be glued, e.g. pH-value, variations of raw material characteristics, surface coatings, as well as corrosion and contamination have a significant effect on the desired bonding strength.

Pressing times strongly depend on material and adhesive temperature.

Bonding of materials with different longitudinal extension must be assessed regarding their long-term behaviour, especially when they are exposed to fluctuating temperature ranges.

Please, consider the relevant Technical Data Sheets of the recommended products mentioned above.

Open time, as well as the necessary pressing time, can only be determined accurately by self-tests because they are strongly influenced by material characteristics, temperature, applied quantity, air humidity, material humidity, thickness of adhesive film, press power, and other criterions. Usually, appropriate safety factors are considered for the guiding values.

Preparation

Acclimatise the product before the application.

The surfaces of the workpieces to be bonded must be dry, and free from dust and grease.

If silicon, TPE sections and polyolefins are bonded, they are to be pretreated with primer COSMO® SP-840.110. The variety of materials requires to carry out some preliminary tests yourself.

Bonding

Apply the adhesive from the trading unit or by means of a CA-dosing unit onto one side.





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Immediately after application, the workpieces must be fit together and pressed until they reach the required functional strength.

To reduce the pressing times, or to accelerate curing of cyanoacrylate adhesives in thicker bonded joints >0.10 mm, the accelerator COSMO® SP-860.120 is to be used.

Bonding of metals

Bonding of aluminium, copper, brass: only on chemically pretreated or varnished surfaces; these materials cannot be durably bonded to be age-resistant without appropriate pre-treatment of the surfaces to be glued.

Due to their variety, age and, if necessary, additional treatment with oil or wax, anodized surfaces do not allow any general statement about wettability or bonding characteristics of these bonding surfaces.

Important instructions

Only instructed personnel in specialist firms are allowed to use the product!

Our user instructions, processing guidelines, product- and performance data, and other technical statements are only general directives; they describe only the condition of our products (values, determination of values on the date of completion) and the performances do not represent a warranty in the sense of § 443 BGB. **Because of the wide variety of applications of the individual product and the relevant special conditions (e. g. processing parameters, material characteristics, etc.), it is up to the user to test it itself;** our free expert advice for application provided in speech, writing, and as test is nonbinding.

Please, also consider the Safety Data Sheet!

Cleaning

Remove the fresh, not cured adhesive from the surfaces and the tools using COSMO® CL-300.150.

Cured adhesive can only be removed mechanically.

Storage

Store the hermetically closed original trading units, in a dry place at temperatures of +15 °C to +25 °C no direct sun radiation.

While transported within the usual transport times, the product may be exposed to temperatures from -15 °C to +35 °C.

Storage life in unopened original packaging: 6 Months.

Optimum storage at temperatures from +2 °C to +8 °C.

During the storage time, viscosity is increasing, reactivity is decreasing.

Packaging

PE-bottle, net weight: 50 g

Other trading units on request.

Accessories

COSMO® SP-810.160 – CA-capillaries

COSMO® SP-840.110 – CA-primer for polyolefins

COSMO® SP-860.120 – CA-accelerator in aerosol can



Industrieverband
Klebstoffe e.V.