

Product Description

With the superglue Cyanolit® series, Panacol-Elosol offers an optimal product range in the field of cyanoacrylates. Cyanolit® adhesives are solvent-free reaction adhesives formulated on the basis of esters of cyanoacrylic acid. They show very good adhesion to many materials and especially to plastics.

Cyanolit® 203 TX is a one part, humidity curing cyanoacrylate adhesive, with extremely good bonding to a wide range of materials including metals, plastics and elastomers.

Cyanolit® 203 TX is a high viscosity instant adhesive with gap filling ability. It is designed for clean, fast and automated assembly applications.

Cyanolit® 203 TX has met the requirements for USP Class VI and is suitable for use in the assembly of disposable medical devices.

Suitability on various substrates

ceramic	✓	rubber	✓	NBR	✓	PA	✓
wood	✓	polyester	o	ABS	✓	PC	✓
PVC	✓	PBTP	o				

✓excellent o suitable * pretreatment necessary/recommended

Curing Properties

Curing takes place without heat supply, pressure or additional activators. The classical one-component cyanoacrylates react with moisture, which is absorbed as a moisture film on the material surfaces, in a few seconds.

The curing speed depends on the gap width and the humidity level. A small gap width and a high humidity accelerate the setting process.

After a short time Cyanolit® reaches high strength. The material continues to harden 24 hours after gluing. Only after this time is the optimum media resistance achieved.

The following table describes the setting times on different substrates.

Substrate	Curing time [sec]
PVC	5
PMMA	10
ABS	15
PC	20
NR	5
Stahl	15

Technical Data

Resin
Appearance

ethyl-2-cyanoacrylate
transparent

Uncured material

Viscosity [mPas] (Brookfield LVT, 25°C, Sp 3, 6rpm) <i>PE-Norm 001</i>	5 000 - 10 000
Viscosity [mPas] (Brookfield LVT, 25°C, Sp 3, 60rpm) <i>PE-Norm 001</i>	1 300 - 1 500
Density [g/cm ³] <i>PE-Norm 004</i>	1,1
Flash point [°C] <i>PE-Norm 050</i>	>83

Cured material

Temperature resistance [°C] <i>PE-Norm 065</i>	-80 - 80
---	----------

Transport/Storage/Shelf Life

Trading unit	Transport	Storage	Shelf-life*
Cartridge	at room temperature max. 25°C	0°C - 10°C	at delivery min. 4,5 months max. 9 months
Other packages			

***Store in original, unopened containers!**

Instructions for Use

Surface preparation

The surfaces to be bonded should be free of dust, oil, grease or other dirt in order to obtain an optimal and reproducible bond.

For cleaning we recommend the cleaner IP® Panacol. Substrates with low surface energy (e.g. polyethylene, polypropylene) must be pretreated in order to achieve sufficient adhesion.

Application

Our products are supplied ready to use. Depending on packaging they can be applied by hand directly from the container or semi or fully automatically. If help is required, please contact our application engineering department.

Cyanoacrylate adhesives react very quickly with humidity (20% - 80%) or the moisture film on the materials. It is therefore advisable to wear gloves and goggles when handling larger quantities. Cyanolit® is applied punctiform - one or more drops, depending on the size of the surface, onto one of the joining parts. The second joining part is fixed with slight pressure, whereby the adhesive is distributed into a thin film. Acid surfaces prevent or retard the curing, while basic surfaces (pH > 7) accelerate curing.

The application can take place directly from the tip of the dosing bottle, but also with dosing devices. Since the achievable strength depends on the application quantity, an even dosage must be taken into account.

Adhesive and substrate may not be cold and must be warmed up to room temperature prior to processing.

After application, bonding of the parts should be done quickly.

For safety information refer to our safety data sheet.

Note

The product is free of heavy metals, PFOS and Phthalates and is conform to the EU-Directive 2011/65/EU "RoHS II" .

Our data sheets have been compiled to the best of our knowledge. The enclosed information describes characteristic properties, with no declaration of commitment. We recommend trials in order to confirm that our products satisfy the particular application requirements. For any additional technical support, please contact our application engineering department. For warranty claims, please refer to our standard terms and conditions.

Appendix

Lap shear strength [MPa]

