

INSTANT ADHESIVES





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### **AFINITICA** Technologies

We are the first company with a specific focus on instant adhesives. Our team comprises an eclectic mix of talents with a shared passion to grow business and create new possibilities in the area of cyanoacrylate adhesives.

Our adhesives are designed for the consumer, professional, industrial, biomedical and cosmetic markets. Our products open up new applications and new opportunities to improve efficiency, performance and user experience.

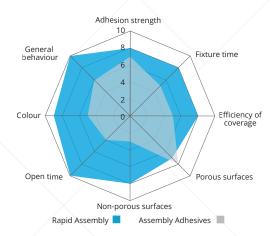
"Simply put - we wish to transform the profile of the materials we are passionate about from the status of simple superglues to the adhesive of choice for performance, sustainability and convenience." Ciaran McArdle - CTO AFINITICA.

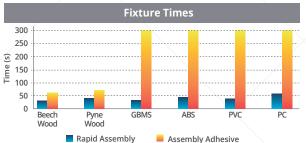
We specialise in cyanoacrylate technology development and welcome queries on product customisation.



### RAPID ASSEMBLY INSTANT ASSEMBLY ADHESIVE

Repositionable and easy to use. The perfect adhesive for assembly, DIY and repair.





BASE	Ethyl Cyanoacrylate
VISCOSITY	Thixotropic Gel
COLOUR	Transparent
FIXTURE TIME	30 seconds
FINAL STRENGTH (24 h)	Mild Steel 80-140 Kg/cm <sup>2</sup>
	Beech Wood
	100-120 Kg/cm <sup>2</sup> (SF)
TEMPERATURE RANGE	-20 °C - +80 °C
AVAILABLE FORMATS	15 g (aluminium tube), 30-100 g
	(plastic tube), 500 g (bottle),
	20 kg (bulk)
ACCESSORIES	Active Spray, Plastic Primer

#### PROPERTIES

- Bonds in 30 seconds.
- High initial tack and final bonding strength.
- Open time up to 2 hours.
- Allows repositioning of parts.
- Can be use for large surfaces.
- Bonds a large range of materials: porous and non-porous (except polyolefins).
- Gel consistency suitable for applications in any orientation.
- Flexible.

adhesion











(SF) Substrate failure



INSTANT ADHESIVES High quality instant adhesives for consumer and professional use.

#### PROPERTIES

• Instant adhesion.

Multi-material

- Extremely high adhesion strength.
- Bonds a large range of materials, including porous substrates (except polyolefins).
- Transparent and easy to use.

**NSF International** 

- Wild range of viscosities (see tables in pages 4 & 5).
- High quality bottle for a long shelf life.
- AF04 certified by NSF. Others can be certified.

High strength

#### **AF PRODUCTS**

The AF products are a series of ethyl cyanoacrylate formulations for the general assembly of close-fitting parts. These products are characterised by high quality, strength and speed.

Additionally, these products have been formulated to bond porous substrates.



	AF 00	AF 02	AF 111	AF 150
BASE	Ethyl Cyanoacrylate	Ethyl Cyanoacrylate	Ethyl Cyanoacrylate	Ethyl Cyanoacrylate
VISCOSITY	Low (1,8-5 cP)	Low (8-25 cP)	Low (25-45 cP)	Medium (60-100 cP)
COLOUR	Transparent	Transparent	Transparent	Transparent
FIXTURE TIME	5 seconds	5 seconds	5 seconds	5 seconds
FINAL STRENGTH (24 h)	Beech Wood	Beech Wood	Beech Wood	Beech Wood
	110-140 Kg/cm <sup>2</sup> (SF)	130-150 Kg/cm <sup>2</sup> (SF)	110-150 Kg/cm <sup>2</sup> (SF)	140-160 Kg/cm² (SF)
	Mild Steel 170-200 Kg/cm <sup>2</sup>	Mild Steel 170-200 Kg/cm <sup>2</sup>	Mild Steel 150-160 Kg/cm <sup>2</sup>	Mild Steel 110-140 Kg/cm <sup>2</sup>
TEMPERATURE RANGE	-20°C - +80°C	-20°C - +80°C	-20°C - +80°C	-20°C - +80°C
AVAILABLE FORMATS	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg
ACCESSORIES	Active Spray, Plastic Primer,			
	precision tips	precision tips	precision tips	precision tips

Instant

adhesion

Transparent

(SF) Substrate failure

stant Adhesive ledium Viscosity

AFINI

SERIES INSTANT ADHESIVES High quality instant adhesives for consumer and professional use.



#### **A SOLUTION FOR EACH APPLICATION**

AFINITICA has enlarged the range of viscosities available in our AF Series to offer a suitable solution for each application, considering the type of material, the adhesion strength, the shape of the parts to be bonded... A complete spectrum of products is now available with quality and performance guaranteed.

Due to the incorporation of the new formulae, the spectrum of products has been reorganized to meet the needs and references that are common for ethyl-based adhesives in traditional markets.

Choose the instant adhesive that best suits the application and be assured of the best result.



Medium

viscosity





High viscosity

	AF 04	AF 200	AF 06	AF 405
BASE	Ethyl Cyanoacrylate	Ethyl Cyanoacrylate	Ethyl Cyanoacrylate	Ethyl Cyanoacrylate
VISCOSITY	Medium (90-140 cP)	Medium (230-350 cP)	High (900-1.300 cP)	High (2.600-3.500 cP)
COLOUR	Transparent	Transparent	Transparent	Transparent
FIXTURE TIME	5 seconds	5 seconds	5 seconds	5 seconds
FINAL STRENGTH (24 h)	Beech Wood 130-150 Kg/cm² (SF) Mild Steel 120-160 Kg/cm²	Beech Wood 150-170 Kg/cm² (SF) Mild Steel 110-150 Kg/cm²	Beech Wood 140-180 Kg/cm² (SF) Mild Steel 140-170 Kg/cm²	Beech Wood 160-170 Kg/cm² (SF) Mild teel 130-180 Kg/cm²
TEMPERATURE RANGE	-20°C - +80°C	-20°C - +80°C	-20°C - +80°C	-20°C - +80°C
AVAILABLE FORMATS	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg
ACCESSORIES	Active Spray, Plastic Primer, precision tips	Active Spray, Plastic Primer, precision tips	Active Spray, Plastic Primer, precision tips	Active Spray, Plastic Primer precision tips

Low

viscosity

ZAPIT & RTA ZAPIT: SPECIAL FORMULA FOR FOOTWARE AND LEATHER GOODS RTA: SPECIAL FORMULA WITH RUBBER TOUGHENING

#### **PROPERTIES**

- Instant adhesion with extremly high bonding strength.
- Bond a large range of materials (except polyolefins).
- Transparents and easy to use.
- High peel strength.
- Bonds in 3 seconds (ZAPIT).
- Specially formulated for bonding leather (ZAPIT).
- Impact resistance (RTA).
- Flexible (RTA).

#### **RTA**

RTA includes rubber thoughened particles which increase the viscosity and offer high peel strength, impacts and vibration resistance. An ideal adhesive for applications where a high resistance in a short time is required. RTA bonds all type of materials incuding metals, plastics and rubbers.

BAS

COL FIX1 FIN/

TEM AVA ACC





resistance

#### ZAPIT

ZAPIT offers the most convenient solution for footware assembly and repair. This product increases manufacturing efficiency by saving time, offers quick and lasting solutions for all type of repairs and allows easy placement of logos and decals.





3 seconds



	ZAPIT	RTA
5E	Ethyl Cyanoacrylate	Ethyl Cyanoacrylate
COSITY	Medium (275-350 cP)	High (1.000-3.000 cP)
LOUR	Transparent	Transparent
TURE TIME	3 seconds	5 seconds
AL STRENGTH (24 h)	Leather (Peel) 23-48 Kg/cm	Policarbonate 80-90 Kg/cm <sup>2</sup> (SF)
	PVC (Shear) 160-180 Kg/cm <sup>2</sup>	Mild Steel 140-170 Kg/cm <sup>2</sup>
IPERATURE RANGE	-20 °C - +80 °C	-20 °C - +80 °C
AILABLE FORMATS	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg
CESSORIES	Active Spray, Plastic Primer,	Active Spray, Plastic Primer,
	precision tips	precision tips

(SF) Substrate failure

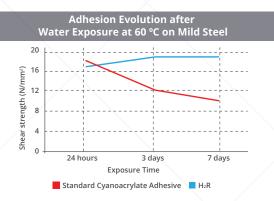




#### HIGH HUMIDITY RESISTANT ADHESIVE Instant adhesive with high resistance to moisture exposure.

#### **ASSURED ADHESION**

Instant adhesive with high resistance to humidity exposure. As opposed to other adhesives, the strength of adhesion is constant at its maximum value even after 7 days of total submersion in water at 60 °C.



BASE	Ethyl Cyanoacrylate
VISCOSITY	Medium (150-250 cP)
COLOUR	Transparent
FIXTURE TIME	30 seconds
FINAL STRENGTH (24 h)	Mild Steel Grit-Blasted
	150-200 Kg/cm <sup>2</sup>
	Beech Wood
	100-150 Kg/cm <sup>2</sup> (SF)
TEMPERATURE RANGE	-20 °C - +80 °C
AVAILABLE FORMATS	20 g, 50 g, 500 g, 20 kg
ACCESSORIES	Active Spray, Plastic Primer,
	precision tips

#### **PROPERTIES**

- Formulated with acrylates for long shelf life.
- Bonds in 30 seconds.
- High resistance to water and moisture exposure.
- Transparent.
- High adhesion strength.
- Bonds a large range of materials (except polyolefins).
- Easy to use.





H<sub>2</sub>R

Water resistance



High strength Multi-material





### THE ODOURLESS TECHNOLOGY

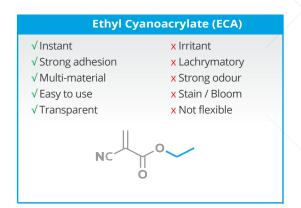
Before developping our production method, there was only one single cyanoacrylate mass production process. This thecnology had not changed in 60 years and it was focused principally on production of a single monomer: Ethyl Cyanoacrylate (ECA), which is today almost a commodity.

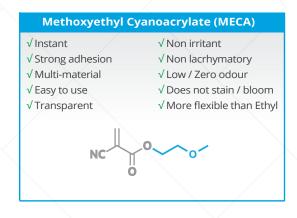
We reject the idea that reactive monomers could only be made by first allowing them to polymerise during manufacture, and that the only way to recover monomer was to subsequently crack apart polymers with large inputs of expensive energy in a process that also created many residues. Such argument limits the scope of the type of monomers that could be realisable in a practical manner.

In AFINITICA, we are proud of having achieved the development of a new crackless production process patented for the cyanoacrylate manufacture. It was implemented in 2015 and allows us to obtain a large range of different types of cyanoacrylates with high performance and purity.

Due to these technological advances, AFINITICA is a pioneer in Methoxyethyl Cyanoacrylate (MECA) based adhesives, which is a non-irritant, odourless and non-staining monomer. Additionally, incorporation of new ways to balance reactivity and stability developed in 2016 enable us to offer unique products with long shelf life at a very competitive price.

Our products have the best quality that can be found in the market. We continue developing and innovating in all possible areas to improve this technology. Continuous improvement is our mantra.





### **BEMO** SERIES

#### HIGH PERFORMANCE ODOURLESS INSTANT GEL ADHESIVES

The most advanced non-irritant and odourless instant adhesives for professional and home use.

#### **METHOXYETHYL GELS**

#### **BEMO 2020**





Transparent

Transparent

Patented

Instant adhesion

BEMO 59



Repositionable





Outdoor use



- High bonding strength.
- Flexible.
- Bond a large range of materials, including polystyrene (except polyolefins).
- Non irritant, non lachrymatory, label free.
- Low odour and low blooming.
- Impact resistance.
- Gel consistency suitable for applications in any orientation.
- Good peel strength.
- Allows repositioning of parts (BEMO 59).
- Water and high temperature resistance for outdoor use (BEMO 64+).
- Patented formula (BEMO 64+).
- Bonds in 5 seconds (BEMO 2020).

	BEMO 59	BEMO 64+	BEMO 2020
BASE	Methoxyethyl Cyanoacrylate	Methoxyethyl Cyanoacrylate	Methoxyethyl Cyanoacrylate
VISCOSITY	Gel (30.000-50.000 cP)	Gel (17.000-50.000 cP)	Gel (17.000-25.000 cP)
COLOUR	Transparent	Whitish	Transparent
FIXTURE TIME	60 seconds	30 seconds	5 seconds
FINAL STRENGTH (24 h)	Beech Wood	Beech Wood	Beech Wood
	120-140 Kg/cm <sup>2</sup> (SF)	120-140 Kg/cm <sup>2</sup> (SF)	120-140 Kg/cm <sup>2</sup> (SF)
	ABS	ABS	Mild Steel Grit-Blasted
	100-120 Kg/cm <sup>2</sup> (FS)	90-100 Kg/cm <sup>2</sup> (FS)	60-100 Kg/cm <sup>2</sup>
TEMPERATURE RANGE	-20°C - +80°C	-20°C - +150°C	-20°C - +80°C
AVAILABLE FORMATS	500 g, 20 kg, others to confirm	500 g, 20 kg, others to confirm	500 g, 20 kg, others to confirm
ACCESSORIES	Active Spray, Plastic Primer	Active Spray, Plastic Primer	Active Spray, Plastic Primer

(SF) Sustrate failure

### **BX & BXY** SERIES

#### HIGH PERFORMANCE ODOURLESS INSTANT ADHESIVES

The most advanced non-irritant and odourless instant adhesives for professional and home use.

#### **PROPERTIES**

- Instant adhesion.
- High bonding strength.
- More flexibility than conventional instant adhesives.
- Non irritant, non lachrymatory, label free.
- · Low odour and low blooming.
- Bonds a large range of materials, including polystyrene (except polyolefins).
- All products available with UV Tracer to allow in-line quality control.
- Transparent and easy to use.
- Different viscosities available (see table).
- BX03 certified by NFS. Others can be certified.
- The BXY Series could be certified under ISO10993 for medical devices use.

#### **SPECIAL GRADE MONOMER**

The BXY Series had been formulated with a special grade Methoxyethyl Cyanoacrylate which improves fixture time that now is only 3 seconds. It also increase the shelf life of the product.



Bonds in 3 seconds

High strength

Non irritant Label free

	BX 01 / BXY 01	BX 03 / BXY 03	BX 05 / BXY 05
BASE	Methoxyethyl Cyanoacrylate	Methoxyethyl Cyanoacrylate	Methoxyethyl Cyanoacrylat
VISCOSITY	BX01: Low (40-80 cP)	BX03: Medium (125-250 cP)	BX05: High (1.100-1.750 cP)
	BXY01: Low (40-80 cP)	BXY03: Medium (120-170 cP)	BXY05: High (700-1.000 cP)
COLOUR	Transparent	Transparent	Transparent
FIXTURE TIME	BX01: 10 seconds	BX03: 10 seconds	BX05: 15 seconds
	BXY01: 3 seconds	BXY03: 3 seconds	BXY05: 3 seconds
FINAL STRENGTH (24 h)	Beech Wood	Beech Wood	Beech Wood
	BX01: 70-110 Kg/cm <sup>2</sup> (SF)	BX03: 90-160 Kg/cm <sup>2</sup> (SF)	BX05: 110-140 Kg7cm <sup>2</sup> (SF)
	BXY01: 80-100 Kg/cm <sup>2</sup> (SF)	BXY03: 120-140 Kg/cm <sup>2</sup> (SF)	BXY05: 130-150 Kg/cm <sup>2</sup> (SF)
	Mild Steel	Mild Steel	Mild Steel
	BX01: 120-150 Kg/cm <sup>2</sup>	BX03: 100-200 Kg/cm <sup>2</sup>	BX05: 70-120 Kg/cm <sup>2</sup>
	BXY01: 90-140 kg/cm <sup>2</sup>	BXY03: 80-130 Kg/cm <sup>2</sup>	BXY05: 100-140 Kg/cm <sup>2</sup>
TEMPERATURE RANGE	-20°C - +80°C	-20°C - +80°C	-20°C - +80°C
AVAILABLE FORMATS	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg
ACCESSORIES	Active Spray, Plastic Primer,	Active Spray, Plastic Primer,	Active Spray, Plastic Primer,
	precision tips	precision tips	precision tips

(SF) Substrate failure



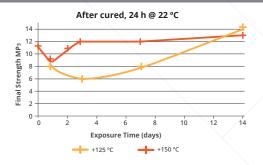
AFINIT

#### FURY HIGH TEMPERATURE RESISTANT ADHESIVE Specially formulated to resist exposures up to +175 °C.

#### THE MAXIMUM PERFORMANCE

Fury is the first odourless cyanoacrylate capable of withstanding temperatures up to +150 °C constantly with prolonged exposure while maintaining its performance and adhesion strength. Moreover, it can withstand temperatures excursions up to +175 °C, making it a truly thermally resistant adhesive.

> **Fury's Adhesion Evolution after Exposure to High Temperatures on Mild Steel**



BASE	Methoxyethyl Cyanoacrylate
VISCOSITY	Medium (280-400 cP)
COLOUR	Transparent
FIXTURE TIME	10 seconds
FINAL STRENGTH (24 h)	Mild Steel 100-190 Kg/cm <sup>2</sup>
	Beech Wood 70-90 Kg/cm <sup>2</sup>
TEMPERATURE RANGE	-20 °C - +150 °C
AVAILABLE FORMATS	20 g, 50 g, 500 g, 20 kg
ACCESSORIES	Plastic Primer, precision tips

#### **PROPERTIES**

- Formulated with acrylates for long shelf life.
- Bonds in 10 seconds.
- Withstands exposure to high temperatures (up to +175 °C).
- · More flexibility than conventional instant adhesives.
- · Low odour and low blooming.
- Bonds a large range of materials (except polyolefins).





High strength



Low odour









### **3D** Fix

**IMPREGNATING ADHESIVE FOR 3D PRINTING PARTS** A single product to offer the best service for 3D printing.

#### **PROPERTIES**

- · High primer capacity.
- Increases resistance and durability of parts.
- Can be used as a coating.
- Non irritant, non lachrymatory, label free.
- · Low odour and low blooming.
- Revives colours.

3DFix

NET 500 g

AFINI

- Glossy finish.
- Drying in 24 h.
- Transparent and easy to use.





- Non irritant Label free
- Coat and protect

& blooming



#### **ALL IN ONE**

3D Fix is a cyanoacrylate adhesive designed specifically for impregnating, priming and hardening of 3D printed gypsum parts. Due to its high priming depth, it impregnates the piece from the inside increasing its resistance and durability.

The colours are visibly more intense and vibrant. It can also be used as a coating to provide extra gloss.





BASE	Methoxyethyl Cyanoacrylate
VISCOSITY	Low (4-7 cP)
COLOUR	Transparent
DRY TIME	24 hours
TEMPERATURE RANGE	-20°C - +80°C
AVAILABLE FORMATS	500 g, 1 Kg, 20 Kg
ACCESSORIES	Active Spray

### THE 2-COMPONENT (2K) TECHNOLOGY

AFINITICA's 2-component (2K) cyanoacrylates (CAs) deliver performance, precision and safety on every kind of applications.

The syringe, plunger and built-in mixer-dispenser package for cyanoacrylates provides an accurate delivery of a reactive messy product in any orientation. Additionally, it provides a cost-effective and efficient use of the viscous product, resulting in:

- No waste due to product overrun in the standard tubes.
- Full use of product and reliable re-usability due to clean and isolated stoppering.
- Easy and safely disposed of solidified product in mixer when finished.

The mixing of both components enables cyanoacrylates to overcome gap filling shortfalls and broaden application scope, as well as modifying the limited property of 1-component (1K). Due to the dual chamber format of the packaging, both parts remain isolated, while the product is uniformly mixed at point of dispensing. That allows use of formulation components that are incompatible in 1-component adhesives and thus enables customisation of factors according to application.



**Adhesive Welding** 

Adhesive Welding Ultra Instant Gap Cure



Adhesive Welding Metal Targeted Substrate Performance



Adhesive Welding Metal+ Instant Targeted Substrate Performance



Super Flex Flexible and Elastic



Super Repair Repairs and Bonds



### ADHESIVE WELDING Adhesive welding **ultra**

#### GAP FILLING INSTANT ADHESIVES

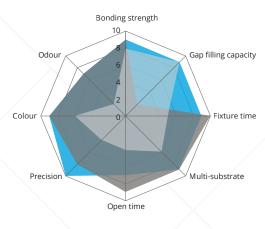
The perfect combination between an epoxy and a superglue.

#### **PROPERTIES**

- High bonding strength.
- Bonds in 10 seconds at zero gap.
- Fills gaps up to 5 mm.
- Active on part for up 5 (Adhesive Welding Ultra) or 30 (Adhesive Welding) minutes.
- Bonds a large range of materials (except polyolefins).
- Transparent.
- Precision dispensing.
- Reclosable and reusable full content.
- Suitable for applications in any orientation.



Gap filling multi-substrate High strength Accurancy



Adhesive Welding 📃 Instant Adhesive 📕 🛛 Fast Epoxy 📕

#### **ADHESIVE WELDING ULTRA**

Adhesive Welding Ultra combines all the properties of Adhesive Welding but is differentiated by shorter working and open times for applications requiring fast fixturing and fast assembly.

	ADHESIVE WELDING	ADHESIVE WELDING ULTRA
BASE	Ethyl Cyanoacrylate	Ethyl Cyanocrylate
VISCOSITY	Thixotropic Gel	Thixotropic Gel
COLOUR	Transparent	Transparent
FIXTURE TIME	10 seconds	10 seconds
FINAL STRENGTH (24 h)	Beech Wood	Beech Wood
	60-140 Kg/cm <sup>2</sup> (SF)	140-160 Kg/cm <sup>2</sup> (SF)
	Mild Steel 140-180 Kg/cm <sup>2</sup>	Mild Steel 120-140 Kg/cm <sup>2</sup>
OPEN TIME	20-30 minutes	5-6 minutes
GAP FILLING CAPACITY	5 mm	5 mm
TEMPERATURE RANGE	-20°C - +120°C	-20°C - +120°C
AVAILABLE FORMATS	10 g, 50 g, 200 g, 400 g	10 g, 50 g, 200 g, 400 g
ACCESSORIES	Active Spray, Plastic Primer,	Active Spray, Plastic Primer,
	dispensers, mixers	dispensers, mixers

(SF) Substrate failure

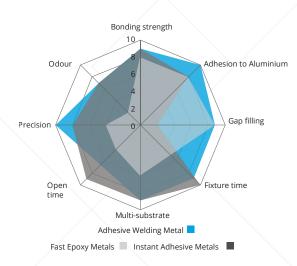
AFINITI **8**CA®

**ADHESIVE** WELDING AFINITI 8 CA'

### ADHESIVE WELDING METAL ADHESIVE WELDING METAL+

INSTANT ADHESIVES WITH GAP FILLING CAPACITY AND EXCELLENT ADHESION TO METALS

The definite solution to work with metals or under high temperatures exposures.



#### **ADHESIVE WELDING METAL+**

Adhesive Welding Metal+ adds high temperature resistance to the excellent adhesion to metals of Adhesive Welding Metal. It allows a wide variety of applications in machinery, engines and other industrial applications. It is also formulated with acrylates to increase durability.

#### PROPERTIES

- High bonding strength.
- Bonds in 10-15 seconds at zero gap.
- Fills gaps up to 5 mm.
- High adhesion to metals, specially aluminium.
- Bonds a large range of materials (except polyolefins).
- Transparent or grey.
- Precision dispensing.
- Reclosable and reusable full content.
- Suitable for applications in any orientation.
- High temperature resistance.



for metals

finish

High temperature resistant

	ADHESIVE WELDING METAL	ADHESIVE WELDING METAL+
BASE	Ethyl Cyanoacrylate	Ethyl Cyanoacrylate
VISCOSITY	Thixotropic Gel	Thixotropic Gel
COLOUR	Grey / Transparent	Grey
FIXTURE TIME	15 seconds	10 seconds
FINAL STRENGTH (24 h)	Aluminium A6082	Aluminium A6082
	150-220 Kg/cm <sup>2</sup>	210-230 Kg/cm <sup>2</sup>
	Mild Steel 150-210 Kg/cm <sup>2</sup>	Mild Steel 120-150 Kg/cm <sup>2</sup>
OPEN TIME	35-40 minutes	5-6 minutes
GAP FILLING CAPACITY	5 mm	5 mm
TEMPERATURE RANGE	-20°C - +120°C	-20°C - +150°C
AVAILABLE FORMATS	10 g, 50 g, 200 g, 400 g	10 g, 50 g, 200 g, 400 g
ACCESSORIES	Active Spray, Plastic Primer, dispensers, mixers	Active Spray, Plastic Primer, dispensers, mixers



(SF) Substrate failure

### SUPER REPAIR

#### IMPACT RESISTANT ADHESIVE WITH GAP FILLING CAPACITY

The only adhesive capable of bonding and repairing in minutes. Machinable, paintable and impact resistant.

#### **PROPERTIES**

- Hardens in 5-10 minutes.
- Instant adhesion and high bonding strength.
- Fills gaps of any volume.
- Bonds a large range of materials (except polyolefins).
- May be drilled, tapped, sanded, filed once hardened.
- Paintable.
- Impact resistant.
- Low volume shrinkage.
- Gel consistency suitable for application in any orientation.











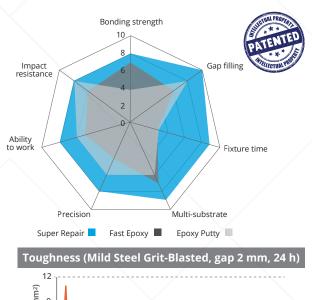
Hardens in 5 minutes

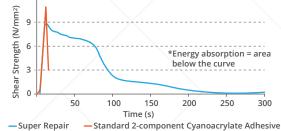
Fills gaps of any volume

Machinable









BASE	Ethyl Cyanoacrylate
VISCOSITY	Thixotropic Gel
COLOUR	Whitish
FIXTURE TIME	15 seconds
FINAL STRENGTH (24 h)	Mild Steel 100-120 Kg/cm <sup>2</sup>
	Beech Wood 140-150 Kg/cm <sup>2</sup> (SF)
GAP FILLING CAPACITY	unlimited
TEMPERATURE RANGE	-20 °C - +80 °C
AVAILABLE FORMATS	10 g, 50 g, 200 g, 400 g
ACCESSORIES	Active Spray, Plastic Primer,
	dispensers, mixers

(SF) Substrate failure

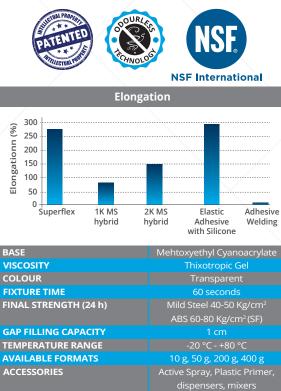
AFINITI **8**CA®

# SUPER

FLEXO-ELASTIC INSTANT ADHESIVE WITH GAP FILLING CAPACITY The first sealant and elastic instant cyanoacrylate. Maximum flexibility and resistance in one single product.

#### **FIRST FLEXIBLE & ELASTIC 2K CYANOACRYLATE**

The only elastic and bulk-curing 2K cyanoacrylate in the market. Due to its formulation based on an low volatility monomer, it is a non-irritant, odourless and non-staining adhesive. It offers an elongation > 200 % with a high bonding strength. Super Flex is ideal for repairing parts that flex or move relative to each other or vibrate.



#### PROPERTIES

- Bonds in 60 seconds.
- Cures in 6-10 minutes.
- Instant adhesion and high peel strength.
- Elongation > 200 %.
- · Non lachrymatory, non irritant, label free.
- · Absorbs impacts and vibrations.
- · Odourless and low blooming.
- · Bonds a large range of materials, specially vitrified surfaces (ceramic, glass), except polyolefins.
- Gel consistency suitable for applications in any orientation.
- Certified by NSF.



and elastic



Gap filling



Label free





AFINITI 🞖 CA®



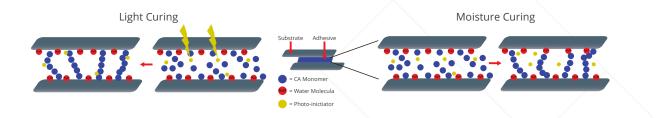
### THE LIGHT CURING TECHNOLOGY

The UV technology is the next big step in the adhesive industry. AFINITICA has developed a process that combines light curing and moisture curing into a single product, working as a dual cure mechanism. This technology has been implemented in Light lock n°1 and is patented, as the first visible light curing Methoxyethyl Cyanoacrylate (MECA) in the market.

When Light lock n°1 is applied between substrates, surface initiated cure begins instantly. In the surface, the bound water activates the adhesive, which polymerizes, bonding the two surfaces. The same chemical process occurs when curing begins through the photo-initiator, once the adhesive is activated by the light, initiation of polymerisation ensues.

The light curing technology offers unique advantages in industrial processes and cost reduction. Ultra-fast cure allows shorter production cycle times, in-line quality control and less work-in-process (WIP) inventory. Moreover, the 1-component system is solvent free, odourless, has zero blooming, requires no mixing and works with precise automated dispensing.

Dual initiation mechanism guarantees the maximum degree of cure in the minimum time in any situation including shadow cure, surface cure, deep cure and cure of excess adhesive fillets. The product can also be used atop or beside single substrates so enabling joint reinforcement and/or sealing.



light lock

Light curing

adhesive

**High** Viscosity

20 g

 Iight lock
 Light curing adhesive
 Low Viscosity 20 g
 Medium Viscosity 20 g

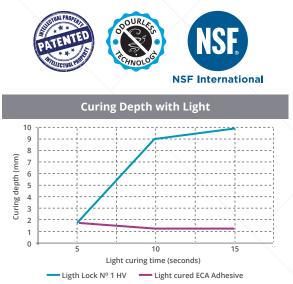
### LIGHT LOCK N° 1

ODOURLESS LIGHT CURING INSTANT ADHESIVE

The first odourless light curing cyanoacrylate. A unique product in the market.

#### **WORLD FIRST**

The propietary formulation exploits a novel photo-initiator system that is highly sensitivity to visible and UV light. Light lock n°1 additionally functions as an odourless instant adhesive offering high bonding strength on a plethora of substrates.



#### **PROPERTIES**

- Dual cure system: moisture (shadow cure) and photo-cure.
- High photosensitivity to visible and UV light
- Room temperature storage stability.
- Dry to touch, tack free cure.
- Cure-on-demand of excess material exuded from bondlines.
- Bonds, fills and reconstructs.
- · Can be used as a coating.
- Odourless, zero blooming.
- Non irritant, label free.
- Available in different viscosities.
- Certified by NSF.
- All products available with UV Tracer to allow in-line quality control.





	Light Lock Nº 1 LV	Light Lock Nº 1 MV	Light Lock Nº 1 HV	Light Lock Nº 1 Gel
BASE	Methoxyethyl Cyanoacrylate	Methoxyethyl Cyanoacrylate	Methoxyethyl Cyanoacrylate	Methoxyethyl Cyanoacrylate
VISCOSITY	Low (10-30 cP)	Medium (180-220 cP)	High (600-1200 cP)	Gel (40.000-50.000 cP)
COLOUR	Cures transparent	Cures transparent	Cures transparent	Cures transparent
FIXTURE TIME UNDER LIGHT	5 seconds	5 seconds	5 seconds	15 seconds
FINAL STRENGTH (24 h)	ABS 120-130 Kg/cm <sup>2</sup> (SF)	ABS 120-130 Kg/cm <sup>2</sup> (SF)	ABS 120-130 Kg/cm <sup>2</sup> (SF)	ABS 129-133 Kg/cm <sup>2</sup> (SF)
	PVC 60-70 Kg/cm <sup>2</sup> (SF)	PVC 120-130 Kg/cm <sup>2</sup> (SF)	PVC 110-130 Kg/cm <sup>2</sup> (SF)	PVC 121-137 Kg/cm <sup>2</sup> (SF)
TEMPERATURE RANGE	-20 °C - +80 °C			
AVAILABLE FORMATS	20 g, 500 g	20 g, 500 g	20 g, 500 g	to be confirmed
ACCESSORIES	Active Spray, Plastic Primer,	Active Spray, Plastic Primer,	Active Spray, Plastic Primer,	Active Spray, Plastic Primer
	precision tips	precision tips	precision tips	

## ACCESSORIES

#### **ACTIVE SPRAY 150ml**

Activator spray for instant adhesives

#### **PROPERTIES**

- Increases curing speed of cyanoacrylate adhesives on acidic woods and porous substrates.
- Dries in seconds.
- Open time up to 24 hours.
- Non toxic.
- Transparent and non yellowing.
- Easy to use.
- Available in sachets.

#### **DISPENSERS AND MIXERS**

For 10 g, 50 g, 200 g and 400 g syringes.

#### PLASTIC PRIMER 30ml

Polyolefin primer for instant adhesives

#### PROPERTIES

- Improves adhesion to difficult to bond substrates.
- Specially formulated for adhesion in polyolefins (PE, PP, Teflon...).
- Suitable for use with other cyanaocrylates.
- Dries in seconds.
- Increases adhesion strength.







### **SUMMARY**

	ADHESIVE WELDING	ADHESIVE WELDING METAL	SUPER REPAIR	SUPER FLEX	ADHESIVE WELDING ULTRA	ADHESIVE WELDING METAL +
BASE	Ethyl	Ethyl	Ethyl	Methoxyethyl	Ethyl	Ethyl
VISCOSITY	Thixotropic Gel	Thixotropic Gel	Thixotropic Gel	Thixotropic Gel	Thixotropic Gel	Thixotropic Gel
COLOUR	Transparent	Grey / Transparent	Whitish	Transparent	Transparent	Grey
FIXTURE TIME	10 seconds	15 seconds	15 seconds	60 seconds	10 seconds	10 seconds
FINAL STRENGTH	Mild Steel Grit-Blasted	Mild Steel Grit-Blasted	Mild Steel Grit-Blasted	Mild Steel Grit-Blasted	Mild Steel	Mild Steel
(24 h)	190-230 Kg/cm <sup>2</sup>	200-240 Kg/cm <sup>2</sup>	190-230 Kg/cm <sup>2</sup>	60-90 Kg/cm <sup>2</sup>	120-140 Kg/cm <sup>2</sup>	120-150 Kg/cm <sup>2</sup>
	Beech Wood	Aluminium A6082	Beech Wood	ABS	Beech Wood	Aluminium A6082
	110-160 Kg/cm <sup>2</sup> (SF)	150-220 Kg/cm <sup>2</sup>	110-160 Kg/cm <sup>2</sup> (SF)	55-70 Kg/cm <sup>2</sup>	140-160 Kg/cm <sup>2</sup> (SF)	210-230 Kg/cm <sup>2</sup>
TEMPERATURE RANGE	-20 °C - +120 °C	-20 °C - +120 °C	-20 °C - +80 °C	-20 °C - +80 °C	-20 °C - +120 °C	-20 °C - +150 °C
GAP FILLING	5 mm	5 mm	unlimited	1 cm	5 mm	5 mm
OPEN TIME	20-30 min	35-40 min	4-10 min	6-10 min	5-6 min	5-6 min
Its ergonomically designed syringe with the static mixer assures a uniformity and high precision application, which is made in a very clean and easy way.						
SPECIFIC PROPERTIES	<ul> <li>Long open</li> </ul>	<ul> <li>Excellent adhesion</li> </ul>	• Bonds, repairs	• Flexible and elastic	<ul> <li>Instant adhesion</li> </ul>	<ul> <li>Instant adhesion</li> </ul>
	and working time	to metals, specially	and reconstructs	(elongation >200%)		
		aluminium			<ul> <li>Short open time</li> </ul>	<ul> <li>Excellent adhesion</li> </ul>
			Can be machined	<ul> <li>Impact and</li> </ul>		on metals
		Long open	once hardened	vibration resistance	• Multi-substrate	
		and working time	after 5-10 min	• Non irritant	• Transparent	<ul> <li>High temperature resistant</li> </ul>
			<ul> <li>Impact resistant</li> </ul>	• NOR IFFICATIC	• Transparent	resistant
			impactresistant	• Low odour	• Short open time	• Short open time
			Minimum volume			
			shrinkage	Low blooming		
			• Patented	• Patented		
AVAILABLE FORMATS	10 g, 50 g, 200 g, 400 g	10 g, 50 g, 200 g, 400 g	10 g, 50 g, 200 g, 400 g	10 g, 50 g, 200 g, 400 g	10 g, 50 g, 200 g, 400 g	10 g, 50 g, 200 g, 400 g

### **SUMMARY**

	RAPID ASSEMBLY	BEMO 2020	BEMO 64+	BEMO 59	BX SERIES	BXY SERIES
BASE	Ethyl	Methoxyethyl	Methoxyethyl	Methoxyethyl	Methoxyethyl	Methoxyethyl
VISCOSITY	Thixotropic Gel	Thixotropic Gel	Thixotropic Gel	Thixotropic Gel	BX01: 40-60 cP	BXY01: 40-80 cP
					BX03: 120-250 cP	BXY03: 120-170 cP
					BX05: 1200-1500 cP	BXY05: 700-1000 cP
COLOUR	Transparent	Transparent	Transparent	Transparent	Transparent	Transparent
FIXTURE TIME	30 seconds	5 seconds	30 seconds	60 seconds	10-15 seconds	3 seconds
FINAL STRENGTH	Mild Steel	Beech Wood	Beech Wood	Beech Wood	Beech Wood	Beech Wood
(Kg/cm <sup>2</sup> , 24 h)	100-120	120-140 (SF)	120-140 (SF)	120-140 (SF)	BX01: 90-110 (SF)	BXY01: 80-100 (SF)
	Beech Wood	Mild Steel Grit-Blasted	Mild Steel	Mild Steel	BX03: 130-170 (SF)	BXY03: 120-140 (SF)
	100-120 (SF)	160-180	170-220	160-190	BX05: 120-160 (SF)	BXY05: 130-150 (SF)
TEMPERATURE RANGE	-20 °C - +80 °C	-20 °C - +80 °C	-20 °C - +150 °C	-20 °C - +80 °C	-20 °C - +80 °C	-20 °C - +80 °C
GAP FILLING	≅0,25 mm	≅0,25 mm	≅0,25 mm	≅0,25 mm	≅0,10-0,20 mm	≅0,10-0,20 mm
OPEN TIME	2 hours	2 hours	2 hours	2 hours	Up to 2 hours depending on viscosity and substrate.	Up to 2 hours depending on viscosity and substrate.
GENERAL DESCRIPTION	Assembly adhesive with fast adhesion, and repositionable during 2 minutes.	The fastest non irritant low odour instant adhesive suitable for working in any orientation.	Moisture and high temperature resistant, non irritant, low odour adhesive for outdoor use.	Flexible non irritant adhesive with good peel strength resistance.	Non irritant instant adhesives for general use.	High performance non irritant instant adhesives for general use.
SPECIFIC PROPERTIES	Repositionable	<ul> <li>Instant adhesion</li> </ul>	• Moisture and high	• Non irritant	Non irritant	Non irritant
PROPERTIES	<ul> <li>Suitable for porous and non-porous substrates (except polyolefins)</li> </ul>	• Non irritant • Low odour and	temperature resistant • Non irritant	•Low odour and low blooming	• Low odour and low blooming	• Low odour and low blooming
		low blooming	<ul> <li>Low odour and</li> </ul>	Peel resistance	<ul> <li>Adhesion to</li> </ul>	<ul> <li>Adhesion to</li> </ul>
	Gel consistency	• Flexible	low blooming	• Flexible	polystyrene	polystyrene
		- HEAIDIE	Flexible		Remarkable flexibility	Remarkable flexibility
		<ul> <li>Gel consistency</li> </ul>	Gel consistency	Repositionable		Instant adhesion
		• High stability	Gerconsistency	•Gel consistency		-instant adhesion
AVAILABLE FORMATS	15 g, 30-100 g, 500 g, 20 kg	500 g, 20 kg, others to confirm	500 g, 20 kg, others to confirm	500 g, 20 kg, others to confirm	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg

### **SUMMARY**

	AF SERIES	ZAPIT	RTA	H₂R	FURY	LIGHT LOCK No. 1	3D FIX
BASE	Ethyl	Ethyl	Ethyl	Ethyl	Methoxyethyl	Methoxyethyl	Methoxyethyl
VISCOSITY (cP)	AF00: 1,8-5	250-400	1.000-3.000	150-250	280-400	LV: 10-30	4-7
	AF02: 8-25					MV: 180-220	
	AF111: 25-45					HV: 600-1.200	
	AF150: 60-100					Gel: 40.000-50.000	
	AF04: 90-140						
	AF200: 230-350						
	AF06: 1.050-1.500						
	AF405: 2.600-3.500						
COLOUR	Transparent	Transparent	Transparent	Transparent	Transparent	Transparent	Transparent
FIXTURE TIME	5 seconds	3 seconds	5 seconds	30 seconds	10 seconds	5 seconds (light cure)	24 hours (dry)
FINAL STRENGTH	Mild Steel	PVC	Polycarbonate	Mild Steel	Mild Steel	ABS	Do not apply
(Kg/cm², 24 h)	AF00: 170-200	160-180	80-90	Grit-Blasted	90-130	LV: 115-130 (SF)	
	AF02: 170-200 AF111: 150-160	Leather (Peel)	Mild Steel	150-200	Beech Wood	MV: 115-130 (SF)	
	AF150: 110-140	23-48 Kg/cm	140-170	Beech Wood	60-100	HV: 115-130 (SF)	
	AF04: 120-160			100-150 (SF)		Gel: 129-133 (SF)	
	AF200: 110-150						
	AF06: 170-200 AF405: 130-180						
TEMP. RANGE	-20 °C - +80 °C	-20 °C - +80 °C	-20 °C - +80 °C	-20 °C - +80 °C	-20 °C - +150 °C	-20 °C - +80 °C	-20 °C - +80 °C
GAP FILLING	$\approx$ 0.10-0.20 mm Up to 2 h depending	$\cong$ 0,15 mm Up to 2 h depending	$\cong$ 0,20 mm Up to 2 h depending	$\cong$ 0,10 mm Up to 2 h depending	$\cong$ 0,15 mm Up to 2 h depending	centimetres Up to 30 minutes	Do not apply Do not apply
	on viscosity and	on substrate.	on substrate.	on substrate.	on substrate.	without light	Do not apply
	substrate.					exposure.	
GENERAL	High performance	Instant adhesive	Instant adhesive with	Instant adhesive with	First odourless	First odourless UV	Strengthening
DESCRIPTION	instant adhesives for general use.	designed for bonding leather.	rubber thoughened particles.	high resistance to humidity and hot	instant adhesive with high temperature	and visible light curing instant	cyanoacrylate primer for 3D printing parts.
		.cathen	particies.	water (+60 °C).	resistance +150 °C.	cyanoacrylate.	
SPECIFIC PROPERTIES	<ul> <li>Instant adhesion</li> </ul>	• Bonds in 3 seconds	• Bonds in 5 seconds	• Humidity and water resistant	• High temperature resistant	• Dual system: light and shadow cure	• High primer capacity
	High bonding	Special formula to	<ul> <li>Impact resistant</li> </ul>	<ul> <li>High bonding</li> </ul>	• Low odour and	• High	• Non irritant
	strength	bond leather	• High peel strength	strength	low blooming	photo-sensitivity	• Dries in 24 h
	• Multi-substrate	• High peel strength	- ingri peer strengtri	Multi-substrate	High bonding     strongth	• Dry to touch	Gloss finish
		• Multi-substrate	Multi-substrate		strength	• Non irritant	• Transparent
		• Multi-Substrate			<ul> <li>Multi-substrate</li> </ul>	<ul> <li>Low odour and zero blooming</li> </ul>	
AVAILABLE FORMATS	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 50 g, 500 g, 20 kg	20 g, 500 g	500 g, 1 kg, 20 kg

(SF) Substrate failure



MONOMERS AFINITICA SPECIALTY MONOMERS

> Our specialty monomers are synthesized through a new-to-the-world innovative industrial method owned by AFINITICA. It was developed to overcome the limitation of the current manufacturing methodology for cyanoacrylates.

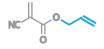
This allows us to offer the widest variety of cyanoacrylate monomers, at purity levels always above 99 % for all our liquid cyanoacrylates, in the range of 98 % purity for our solid monomers and bis-cyanoacrylates, and even medical grade monomers with a 99.5+ % of purity.



APT-101 Ethyl Cyanoacrylate



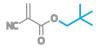
AF570 Allyl Cyanoacrylate



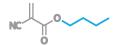
APT-104 Isopropyl Cyanoacrylate



AF540 Neopentyl Cyanoacrylate

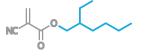


APT-103 n-Butyl Cyanoacrylate

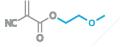


APT-304 2-Ethylhexyl Cyanoacrylate

APT-105 2-Octyl Cyanoacrylate



APT-102 β-MethoxyethylsCyanoacrylate APT-303 Tetrahydrofurfuryl Cyanoacrylate



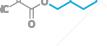
AF880 β-EthoxyethylsCyanoacrylate

APT-305 Octadecyl Cyanoacrylate

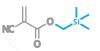
APT-307 Phenylethyl Cyanoacrylate

APT-306 3-Cyclohexenyl Cyanoacrylate

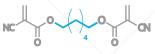




AF560 Trimethylsilyl Cyanoacrylate



APT-301 1,6-Hexanodiol bis-Cyanoacrylate







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