



ENGINEERING ADHESIVES EIMEA

# Product Selection Guide

## Methylmethacrylate Adhesives

Cyberbond Methylmethacrylate adhesives, also known as MMAs, are reaction adhesives mostly used for structural joints of metals and plastics. They represent a perfect alternative to traditional joining methods such as screwing, riveting or welding. The hardening is based on a polymerization reaction which is triggered by a reactive radical usually consisting of peroxide. Compared to competitive products Cyberbond MMAs cure less exothermic which minimizes the risk of potential cracking in the substrates, especially with plastic joints. The most significant difference is the fact that Cyberbond MMAs do NOT consist of toxic peroxides or toxic accelerators. Additionally our MMAs with a 1:1 mix ratio are also free of methacrylic acids.

The product portfolio is divided into different processing times (pot lifes), viscosities, applications and colors. Here we make a fundamental distinction between structural and elastic products.

### STRUCTURAL MMA ADHESIVES

All our structural MMA's are temperature resistant from -50 °C to +120 °C and fully cured after 24 hours. They are REACH & ROHS compliant.

Product	Key Properties	Mixed viscosity (at room temperature)	Open time	Setting time	Mix ratio	Elongation at break	E-modulus	Tensile strength	Colour
AL 6055	General purpose, fast cure, medium viscosity	25.000-45.000 mPas @ 1 1/s rpm	40-60 s	3-6 min	1:1	30-50 %	600-800 MPa	15-20 MPa	A-component pink
									B-component green
AT 6060	General purpose, short open time, high strength on metals	80.000-140.000 mPas @ 1 1/s rpm	2-4 min	5-10 min	1:1	30-40 %	800-1.200 Mpa	20-30 MPa	A-component offwhite
									B-component amber
AT 6065	Long open time vs fast setting time*, elastic	25.000-60.000 mPas @ 1 1/s rpm	9-11 min	5-10 min (depending on substrate)	10:1	40-60 %	300-400 MPa	12-15 MPa	A-component offwhite
									B-component red
AL 6070 Low odour	Low odour product with good strength on various substrates	10.000-20.000 mPas @ 1 1/s rpm	1-3 min	3-5 min	1:1	5-10 %	800-1.200 Mpa	17-20 MPa	A-component transparent - milky
									B-component transparent - milky
AT 6085	Long open time vs fast setting time*, structural	25.000-60.000 mPas @ 1 1/s rpm	9-11 min	5-10 min (depending on substrate)	10:1	15-30 %	600-800 MPa	14-18 MPa	A-component offwhite
									B-component red
AT 1760	General purpose, longer open time, very high strength	80.000-140.000 mPas @ 1 1/s rpm	15-20 min	20-30 min	1:1	30-40 %	800-1.200 Mpa	20-30 MPa	A-component offwhite
									B-component amber

\*The adhesive does not harden as quickly in the mixer and the user can work longer with a mixer tube. The initial strength on the substrate is established faster than the adhesive hardens in the mixer. This property is usually exactly the opposite.

## ELASTIC MMA ADHESIVES

All our elastic MMAs are temperature resistant from -50 °C to +120 °C and fully cured after 24 hours. They are REACH & ROHS compliant.

Product	Key Properties	Mixed viscosity (at room temperature)	Open time	Setting time	Mix ratio	Elongation at break	E-modulus	Tensile strength	Colour
AL 6028	General purpose, fast cure, high flexibility	10.000-20.000 mPas @ 1 1/s rpm	40-60 s	4-7 min	1:1	180-220 %	150-300 MPa	9-12 MPa	A-component offwhite
									B-component amber
AT 1735	General purpose, long open time, high strength on metals	80.000-140.000 mPas @ 1 1/s rpm	15-20 min	20-40 min	1:1	150-200 %	400-600 Mpa	12-16 Mpa	A-component offwhite
									B-component grey
AT 1740 PP/PE	PE/PP bonder without pre-treatment	200.000-400.000 mPas @ 1 1/s rpm	2-3 min	10-15 min	10:1	220-300 %	<150 MPa	<9 MPa	A-component offwhite
									B-component amber

## PACKAGING

Cyberbond MMA adhesives are available in common double-chamber cartridges with mixing tubes. In addition we offer plastic bottles with wide necks for thixotropic grades as well as plastic canisters for non-thixotropic products. Furthermore internally coated metal hobbcocks are available that can be used in automatic mixing and dosing machines with follower plate. For further detailed questions please visit our website [www.cyberbond.eu](http://www.cyberbond.eu) or contact us at any time.

We are here when you need us. For more information, please contact [cyberbond@hbfuller.com](mailto:cyberbond@hbfuller.com).



## ABOUT H.B. FULLER

Since 1887, H.B. Fuller has been a leading global adhesives provider focusing on perfecting adhesives, sealants and other specialty chemical products to improve products and lives. H.B. Fuller's commitment to innovation brings together people, products and processes that answer and solve some of the world's biggest challenges. Our reliable, responsive service creates lasting, rewarding connections with customers in electronics, disposable hygiene, health and beauty, medical, transportation, aerospace, clean energy, packaging, construction, woodworking, general industries and other consumer businesses. And, our promise to our people connects them with opportunities to innovate and thrive.

 **H.B. Fuller** |  **Cyberbond CB** For more information about our company, visit [www.hbfuller.com](http://www.hbfuller.com) or [www.cyberbond.eu](http://www.cyberbond.eu)

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IMPORTANT: It is the user's responsibility to test and determine the suitability of a product for the user's intended use. Any product samples provided for testing are provided in accordance with standard limited warranties as stated on our technical data sheets.

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