

ADHESIVE



iBond MAG 32 Structural Acrylic Adhesive

iBond Mag 32 is a no-mixing, high viscosity structural adhesive with medium cure speed, for a wide variety of industrial assembly applications. It bonds a wide range of materials with the use of Activator ACT 2.

FEATURE:

- Adhesive is applied to one surface and Activator to the other; press together and fixing is achieved within few minutes.
- Excellent resistance to gasoline, lubricants, water, solvents, etc.
- High impact and temperature resistance.

APPLICATIONS:

- Ideal for bonding Metals, Ferrite, Plated Metals, etc.
- Widely used for electric motors and loudspeaker assembly.

ADHESIVE PROPERTIES:

Liquid:

Composition	Methacrylate Ester
Appearance	Clear Amber liquid
Viscosity	10,000 – 24,000 mPa.s
@ 25 °C, Brookfield RVT	
Flash Point (TCC), °C	> 92
Specific Gravity @ 25°C	1.06
Cure Speed @ 25°C	5 – 7 Minutes
Full Cure	24 hours

Cured Adhesive:

Gap Filling	0.05 – 0.50 mm
Elongation at break	155 % ISO 37
Tensile Strength,	35 N/mm ² ISO 37
	>4,800 psi
Tensile Modulus,	620 N/mm ² ASTM D 638
	>79,000 psi
Peel Strength	2.3 N/mm ISO 11339
	> 11 lb/inch
Lap Shear Strength	> 12 N/mm ² ISO 4587
Steel to Steel (grit blasted)	> 1,650 psi
Temperature Range	-65to350°F

ADHESIVE



Physical Properties:

Temperature Range, - 50 to 120 °C
Dielectrical Constant DIN 53483 (Mhz) 4.5
Coefficient of Thermal Expansion, ASTM D696, $K^{-1} 80 \times 10^{-6}$
Coefficient of thermal conductivity, ASTM C177, $W.m^{-1} k^{-1} 0.1$

Chemical Resistance:

Chemical	Temp. °C	% Initial Strength Retained	500 hours	1000 hours
Acetone	22		55 %	55 %
Ethanol	22		80 %	75 %
Motor Oil	125		100 %	90 %
Water/Glycol	87		75%	60 %

APPLICATION INSTRUCTIONS:

- All surfaces must be clean, dry, dust and grease free. Best results will be achieved with surfaces that have been lightly abraded prior to bonding.
- To ensure a fast and reliable cure, activator should be applied to one of the bond surfaces and the adhesive to the other surface. Parts should be assembled within 15 minutes.
- The recommended bondline gap is 0.2 mm. If bond gaps are larger (up to maximum of 0.5 mm), or faster cure speed is required, activator should be applied to both surfaces. Parts should be assembled within 1 minute.
- Excess adhesive can be wiped away with organic solvent. Adhesive bond should be allowed to develop full strength before subjecting to any service loads.

Storage:

Store product in a closed container in a dry location. Ideal storage temperature range is 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

PRECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the product.

Warranty: All products purchased from or supplied by Adhesive R&D, Inc. are subject to terms and conditions set out in the contract. Adhesive R&D, Inc. warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Adhesive R&D, Inc. is consider accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Adhesive R&D, Inc. makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such information or product will not infringe any patent.