

Agomet[®] M

Cold curing gap filling Methacrylate adhesive for metals and plastics with good chemical resistance

Characteristics	Agomet M is especially well suited for bonding rigid plastics and metals. The product displays gap-filling properties and good resistance to chemicals.	
Bondable Materials	Rigid plastics, especially rigid PVC, CAB, EP, UP, FRP, PC, PMMA and formaldehyde condensation resins. Metals, especially steel and aluminium (except copper/zinc/tin-alloys).	
Viscosity	Approx. 15 Pa.s.	
Specific Gravity	Approx. 0.98	
Storage stability	In the original, unopened container, Agomet M can be stored for at least 1 year at room temperature.	
Mixing ratio	100 parts Agomet M are mixed homogeneously with 2 - 5 %, preferably 3 % of hardener.	
Potlife	After addition of 3 % hardener, the potlife of a 20 g testing sample at 23°C is about 50 minutes.*	
Pretreatment of the surfaces	The surfaces to be bonded must be free from all contamination and, most important, free from grease and dust. Mechanical roughening of these surfaces is advisable.	
Application process	The adhesive mixture is applied to the surfaces to be bonded. Immediately after the surfaces have been brought together, the parts should be kept under contact pressure.	
Strength values	<u>Tensile shear strength</u> according to DIN 53 283 Test material: AlCuMg2pl(Bondur F44) Test specimen: 100 x 25 x 1.6 mm Overlap: 12 mm (single overlap)	<u>25 N/mm²</u>
	<u>Peel strength</u> measured by the T-peel test according to DIN 53 282 Test material: aluminium F 13,3 Test specimen: 100 x 30 x 0.5 mm	<u>approx. 4 N/mm</u>

* The bonded parts can be handled after 90 minutes. Final strength is reached after 24 hours.

Remark: The parallel product "Agomet MDS" has a shorter potlife and is thixotropic.

Chemical Resistance Test material: Rigid PVC
Test specimen: 100 x 20 x 2 mm

Tests conducted over a period of 6 months have shown that the bonds are resistant to:

- water
- soda solution (15 %)
- acetic acid (10%),
- chromosulphuric acid.

Long-term storage for 5 years in sodium hydroxide solution (20 %) and sulphuric acid (20 %) resulted in no decrease in the strength of the joints.

Temperature Stability Bonded joints display long-term durability at temperatures ranging from -30°C to +80°C. At temperatures exceeding 80° up to approximately 120°C, the bonding strength decreases noticeably; above 120°C, it decreases significantly. Exposure to short-term thermal loads between 180° and 220°C without mechanical stress - e.g. during paint bake -, in general hardly impair the bonded joints.

Handling Precautions

Caution

Our products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. These precautions are described in greater detail in the Material Safety Data sheets for the individual products and should be referred to for fuller information.

All recommendations for the use of our products, whether given by us in writing, verbally, or to be implied from the results of tests carried out by us, are based on the current state of our knowledge. Notwithstanding any such recommendations the Buyer shall remain responsible for satisfying himself that the products as supplied by us are suitable for his intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility therefore. The Buyer shall ensure that the intended use of the products will not infringe any third party's intellectual property rights. We warrant that our products are free from defects in accordance with and subject to our general conditions of supply.

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Materials

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