

Agomet[®] F 252

Methacrylate adhesive with good thermal stability, for bonding of metals and rigid plastics

<u>Properties</u>	Agomet F 252 bonds ferrous and non-ferrous metals as well as rigid plastics at room temperature. For a methyl methacrylate-based adhesive, Agomet F 252 has a very good thermal stability.
Bondable Materials	Metals such as steel, stainless steel, aluminium, copper, brass, ferrites.; rigid PVC, ABS, polystyrene, polycarbonate, acrylic glass, polyester moulded parts and other rigid plastics.
Viscosity	Thixotrop, very pasty.
Specific Gravity	Approximately 0.9
Mixing Ratio	Supplied in a cartridge, Agomet F 252 and <i>Hardener K 100 red</i> are mixed properly in the 10:1 ratio.
Time	Processing time: approximately 8 minutes. About 17 minutes later, the bonded parts can be handled. The final strength is reached within 24 hours.

Processing

Surface Preparation	With Agomet F 252, excellent strength values can normally be obtained even without particular pre-treatment of the parts to be joined. Normal residues of rolling or drawing oil are relatively compatible with F 252 and can remain on the surfaces to be bonded. As with all bonds, however, the bonding strength can be optimised by additional preparation of the surfaces: they must be free of loose impurities such as dust, oxides, grease, release agents or plasticizers. A simple wipe with a solvent such as ethyl acetate or butanone - for plastics: alcohol - is sufficient.
Application of Adhesive	<p>Agomet F 252 fills joint gaps of 5 mm and more without difficulties.</p> <p>Agomet F 252 can be processed at temperatures ranging from 15°C to 30°C. Higher temperatures shorten the setting time.</p> <p>The cartridge system provides an easy to handle, clean and simple application method. The ready to use cartridges contain the ideal adhesive-hardener ratio: Simply dispense the adhesive to the point on one of the parts to be bonded - without complicated measuring or mixing operations. Then join the parts immediately, fit and clamp. Polymerisation starts as soon as the adhesive is mixed with the red hardener in the static mixer.</p>

Bonding Performance

Tensile	Aluminium/Bondur F 44 (AlCuMg 2 pl)	appr. 33 MPa (= N/mm ²)
Shear Strength	Steel	appr. 27 "
	V4A	appr. 29 "
	Copper	appr. 22 "
	Brass	appr. 26 "
	Rigid PVC (d = 2.2 mm, no pretreatment)	> 10,0 " material break

According to DIN 53 283,

test specimen 100 x 25 x 1.5 mm, bonded area 25 x 12 mm, pretreatment: degreased, roughened.

Thermal Stability Agomet F 252 features high strength values between -40 °C and +130 °C. Brief thermal loads up to 200 °C can be tolerated without significant degradation of the strength.

Chemical Resistance Agomet F 252 has a very good resistance against diluted mineral acids and good resistance against alkalis, gasoline and Diesel fuels. Bonds produced with F 252 also show good resistance under the effects of moisture and heat (tropical climate), as well as under the influence of aqueous solutions.

Advice

Shelf life In its original, unopened container, Agomet F 252 can be stored for up to 9 months. Storage conditions: cool and dry. Expiry date is indicated on the carton.

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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