

TENABOND® 124M



PRODUCT DESCRIPTION

Ready for use one component, MS Polymer® based adhesive for insulated glass bonding. This product is intended for professional use only. Product can be easily applied by using manual dispensing guns as well as industrial adhesive dispensers. Compatible with all insulating glass sealants TENAGLASS. For the use of the product in combination with other sealants the approval from manufacturer's technical department is required. Adhesive cures in the reaction with air moisture. After curing it has good strength-strain properties and excellent adhesion to glass, PVC and other polymer materials, wood, metals and to all secondary sealants TENAGLASS.

MAIN APPLICATION FIELDS

- Bonding of insulating glass in windows (for bonding position Group K in accordance with RAL GZ 716-1 Section III, Part A)
- Bonding of glazing in partitions
- Bonding of glazing in other structures

ADVANTAGES

- Applicable with dispensing gun in wide temperature range
- Excellent resistance to flow in vertical joints
- Excellent adhesion to the most of PVC profile systems without use of primer
- Compatible with insulating glass sealants TENAGLASS
- High weathering resistance, particularly in moist and hot environment
- Retains elasticity in wide temperature range
- Does not release silicone oils - recommended for the self-cleaning glass coatings
- Environmentally friendly and safe in use – free of isocyanates, silicones and solvents
- Non-corrosive
- Odourless
- Negligible shrinkage

TECHNICAL DATA

Product data	
Appearance	Black or white thixotropic compound Other colours on request
Chemical base	One component MS Polymer®, moisture curing
Packaging	Product is packed in 600 ml laminated foil sausages or in 290 ml cartridges. Supplied in cardboard boxes. One box contains 15 sausages or 24 cartridges. Special packaging in drums on request.
Shelf life/storage	for sausages and cartridges: 18 months for drums: 6 months from the date of production if stored in unopened, undamaged original packaging, in dry place in temperature up to + 30 °C
Adhesive characteristics	
Unless other specified, characteristics are given for standard conditions, i.e., air temperature +(23 ± 2) °C and relative humidity (50 ± 5) %.	
Skinning time (TTM 013)	≤ 20 minutes
Curing rate (TTM 010)	≥ 2 mm per 24 hours
Shrinkage (ISO 10563)	≤ 3 %
Density (fresh adhesive) (ISO 1183-1)	≈ 1,5 kg/litre
Adhesive properties in tensile (ISO 8339)	
• ultimate strength	≥ 1,5 MPa
• elongation at break	≥ 350 %
• modulus at 100 % elongation	≥ 0,8 MPa
Cohesive tensile properties (ISO 527)	
• stress at break	≥ 2,0 MPa
• strain at break	≥ 400 %
Hardness, Shore A (ISO 868)	≥ 40
Water vapour transmission (ISO 12572)	≥ 50 g H ₂ O/ (m ² × 24h)
Application temperature	+ 1 °C to + 50 °C
Service temperature	- 50 °C to + 70 °C
Joint characteristics	
Joint movement capacity (to initial width)	± 25 %
TTM - Manufacturer's testing method	

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ADHESIVE JOINT DESIGN

Before the application of the adhesive always perform the tests to make sure that all materials having direct or indirect contact are compatible and do not change or affect the properties of each other. This applies especially if the adhesive is intended to be in contact with any sealant or any other constituent containing the substances capable to migrate from the bulk to the boundary surfaces or even into the neighbouring materials, or into the cavity of the insulating glass.

This adhesive is compatible with all insulating glass sealants TENAGLASS. For the use of the adhesive in combination with other sealants the approval from manufacturer's technical department is required. Always perform adhesion tests with real substrates prior to the use of adhesive in the specific structure. Please contact manufacturer's representatives if adhesion to the specific substrates is under doubt.

If other joint constituents can be influenced by this adhesive, please refer to the respective material suppliers. In case of doubt always choose the design of adhesive joint, where the adhesive is in contact with glass pane and window frame material only, i.e., avoid direct contact between adhesive and any other constituent containing migrating substances.

SURFACE PREPARATION

Surfaces of the substrates have to be sound, clean and dry. Remove any surface contaminants or loose material affecting the formation of durable bond, for example, dusts, greases, residuals from adhesive tapes et cetera. Clean the surfaces contaminated with oil, remains of adhesive tapes, grease or dust, or surfaces pre-treated with preserving agents or any other special agents, by using solvents appropriate for the specific surface and permitted by local provisions (e.g. with acetone or mix of acetone with isopropanol).

Obtain the test joint on production site to inspect quality of the prepared joint prior to manufacturing. If the surface preparation instructions are followed but the adhesion is still insufficient then special surface treatment is required. In this case please consult with manufacturer's representative.

ADHESIVE APPLICATION

Before application of adhesive read the safety data sheet and ensure all safety requirements are fulfilled.

Ensure the adhesive is applied in specified temperature range and on the surfaces that are designed and prepared in accordance with provisions given above. Store the packaging with adhesive at recommended temperature range for one day before use. Inject the product into the joint by using special dispensing equipment.

At lower temperatures the viscosity of the adhesive rises. For better results ensure stable temperature on production site.

Clean the tools by using solvent permitted by local provisions (if acceptable, acetone or mix of acetone and isopropanol).

ADHESIVE CURING

Adhesive cures in the reaction with air moisture. Curing starts at the surfaces contacting with air and then develops towards the core of the adhesive layer.

Curing speed depends on the air temperature and air humidity. Curing speed can be increased by increasing the air temperature and air humidity in the curing zone. However, curing at temperature exceeding +50 °C should be avoided since it can cause the drop of adhesive strength.

Remove excess of cured adhesive mechanically.

LEGAL NOTES

The information given above, and, in particular, the recommendations relating to the application and end-use of TENACHEM products, is based on TENACHEM current knowledge and experience. The information remains valid only as long as the product is stored, handled and applied in accordance with manufacturer's recommendations. In praxis the conditions on site as well as substrate properties will differ significantly. Therefore the user of the product must test the product's suitability for the intended application and purpose. TENACHEM reserves the right to change the properties of its products. In all cases the most recent version of product description applies.