

Turbo All-Seal

Dialinas S.A.

Fast curing, permanently elastic 1-component sealant and adhesive based on SMP. The neutral-crosslinking, moisture curing product is developed for a universal application. It is suitable for facade, glazing and thanks to its high mould resistance for sanitary joints as well as joints in the floor area. Absolutely weather-resistant, odourless and very low emission. Suitable for food-stuff related applications and for AC-plants, corresponding VDI 6022. Fulfils the requirements of the international maritime organisation IMO.

Product advantages

- Simple processing
- High elasticity, good mechanical strength
- Long processing time
- Free of solvents, isocyanates and silicones
- Odourless
- Very low emission
- Non-corrosive on surfaces
- Very wide adhesion range
- Grindable and paintable
- Very suitable for Minergie-ECO

Technical data

Chemical base	Silane modified polymer
Consistency, DIN EN ISO 7390	Stable, ≤ 3 mm
Mechanism of curing	1 comp. moisture curing
Shore-A-hardness, DIN 53505	32
Modulus elongation at 100%, DIN 53504 S2 *	ca. 0.6 N/mm ²
Elongation at break, DIN 53504 S2 *	ca. 600%
Tensile strength, DIN 53504 S2 *	ca. 1.6 N/mm ²
Tooling time	max. 30 min.
Curing rate after 24h	≥ 2.5 mm
Curing rate after 48h	≥ 3.5 mm
Density	1.48 \pm 0.05 g/cm ³
Volume change, DIN EN ISO 10563	$\leq 3\%$
Temperature resistance after curing	- 40 °C to + 90 °C
Application temperature	+ 5 °C to + 40 °C
Movement capability	20%
Elastic recovery, DIN EN ISO 7389, at elongation of 60%	$\geq 60\%$

All measurements were performed under normal conditions (23 °C and 50 % relative humidity).

* The data are based on measurements after 7 days.

Application

Suitable for connection joints, movement and facade joints in building construction on concrete, bricking, stucco, wood, metal and several plastics. For connection and movement joints in the sanitary, plumber and construction area. Particular suitable for naturalstone (no marginal zone discolouration) and wood flooring such as parquet. Connection joints on windows, doors etc. Bonding of mirrors and one side-coated glass back walls. Contact with adhesives and sealants from other manufacturers must be avoided.

Substrate range

Suitable materials are metals, powder-coated, varnished, galvanised, anodised, chromed or hot zinc dipped surfaces, various plastics, ceramics, natural-/ artificial stone, glass, concrete and wood. Due to the large variety of different plastics and compositions as well as materials which are susceptible to cracks, preliminary tests are recommended. Not suitable for use on deck strips of copper.

Meets the standards

- ASTM C 1248, no discolouration on porous substrates
- eco-bau 1st priority ECO-BKP
- EMICODE EC1Plus
- Eurofins IAC Gold
- IMO FTFC Parts 2+5
- ISEGA (food production area)
- ISO 11600-F20-HM
- ISO 11600-G25-HM
- AC-plants according to VDI 6022

To qualify your product, please note that an appropriate test certificate must be issued on your name for most standards. For further information we are at your disposal.

Technical data sheet Turbo All-Seal

Substrate preparation

Perfect sealing work requires correct joint dimensions and pre-treatment of the surfaces. For dimensioning of building construction joints see DIN standard 18540 and SIA standard 274. For maximum adhesion strength a dry, clean, grease free and structurally proper surface is required. On smooth, non-absorbent substrates a pre-cleaning with rubbing alcohol or isopropyl is recommended. Porous surfaces may need to be grinded, free of dust and cleaned. During renovations the old sealant must be removed as much as possible. The chemical base of the old sealant must be clarified. We recommend to consult our application engineers. The compatibility with adjacent materials, coatings etc. must be determined in advance.

Adhesion promoter

With most materials a good adhesion is achieved even without adhesion promoter. In the case of moisture influence on absorbent or difficult substrates, we always recommend the application of Adhesion Promoter V21 in advance. For non-absorbent substrates we recommend the application of Adhesion Promoter V2. For thermo-painted or powder-coated surfaces and plastic materials we recommend our Adhesion Promoter V40. Preliminary tests are recommended. Note: Adhesion promoter and thinly elapsed sealant leave stains that can not be completely cleaned.

Processing

- Prepare the joint according to the substrate preparation and pre-treatment description
- Observe and comply with the expiry date of all materials used
- Cut the nozzle tip according to the joint width
- Place container into suitable gun (manual, air, caulking gun)
- Apply the material bubble free into the joint
- The joint must be applied within the tooling time
- For joint smoothing we recommend using our tooling agent and if necessary joint tools
- Non-cured sealant can be removed with rubbing alcohol or isopropyl
- Cured sealant can only be removed mechanically
- V-nozzles are recommended for bonding applications
- Depending on the bonding surface, material expansion, tension and mechanical stresses a layer thickness of 1 - 6 mm is recommended
- Can be applied with automatic dispensing equipment
- For vapour permeable substrates the material can be applied in a large area using a notched trowel
- The bonding must take place within the processing time

Paint compatibility

Due to the diversity of varnishes and paints on the market we recommend preliminary tests. Using paints based on alkyd resins may delay the drying process. If applied on painted or plastered substrates a sufficient drying time of the paint / plaster must be kept (in general 10 days). After cleaning with acetone joints can be varnished at any time.

Chemical resistance

- Good against water, aliphatic solvents, oils, grease, diluted inorganic acids and alkalis
- Moderate against esters, ketone and aromatics
- Not resistant against concentrated acids and chlorinated hydrocarbons

Shelf life and storage conditions

- Shelf life depending on packaging
- Store cool and dry (10 - 25 °C)
- Further information on request

Work and environmental safety

Important information about work and environmental safety is available on the material safety data sheet.

merz+benteli ag

Freiburgstrasse 616
CH - 3172 Niederwangen
Phone +41 31 980 48 48
Fax +41 31 980 48 49
info@merz-benteli.ch
www.merz-benteli.ch

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