Technical data sheet



Merbenit DC25

Merbenit DC25 is an elastic sealant for the caulking of timber panelled deck in ship building. Thanks to SMP base excellent for processing and grinding. Merbenit DC25 is in particular resistant to environmental influences. Meets the requirements of the International Maritime Organisation IMO.

Product advantages

- Compatible with paints
- Simple processing
- High elasticity, good mechanical strength
- Long processing time
- Free of solvents, isocyanates and silicones
- Non-corrosive on surfaces Impact and vibration resistant (shock absorbing)
- Very wide adhesion range
- Very good sealing properties
- Excellent weather resistance and durability
- Rapidly grindable

Technical data

Chemical base	Silane modified polymer
Mechanism of curing	1 comp. moisture curing
Consistency	pasty, not stable in vertical joints
Tooling time	max. 20 min.
Curing rate after 24h	≥ 2.5 mm
Curing rate after 48h	≥ 3.5 mm
Shore-A-hardness, DIN ISO 7619-1	30
Tensile strength DIN 53504 S2*	ca. 1.6 N/mm²
Modulus elongation at 100%, DIN 53504 S2 *	ca. 0.6 N/mm²
Elongation at break, DIN 53504 S2 *	ca. 600%
Density	$1.36 \pm 0.05 \text{g/cm}^3$
Volume change, DIN EN ISO 10563	≤ 4%
Temperature resistance after curing	- 40 °C to + 90 °C
Application temperature	+ 5 °C to + 30 °C

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

Application

Application

Suitable for sealing of teak, pitch pine, oak, sipo etc. Sealing in areas of intense weather conditions and UV strain. Avoid contact points to non-system adhesives and sealants of other manufacturers. Note: Due to the large number of care products available on the market for teak (which includes teak cleaner, teak oils, etc), we cannot offer a guarantee for incompatibilities that may occur. We recommend to clean the final deck only with seawater and a brush.

Substrate range

Teak, larch, doussie, douglas fir, pitch pine, deck covering of plastic (except polyethylen and polypropylen) on boat plywood, fiberglass, aluminium and steel. Note: The substrate must be free of rust and treated against corrosion.

Meets the standards

IMO FTPC Parts 2+5

^{*} The data are based on measurements after 7 days.

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Substrate preparation

During renovations: replace defective timber and grind the joint edges. The joints must be free of dirt, dust, oil and grease. Insert a joint tape to avoid a three-sided bonding. Make sure contact points to system strange adhesives and sealants from other manufacturers are avoided. Make sure no direct sunlight affects the deck during the application until Merbenit DC25 is fully cured. The temperature during the application shall be constant or falling. The compatibility with adjacent materials, coatings etc. must be determined in advance.

Adhesion promoter

Because of the high loads affecting a deck joint, a previous treatment of the timber with Adhesion promoter SP is recommended in any case. Adhesion Promoter SP provides an ideal adhesion between the timber and Merbenit DC25. In addition, a barrier is created by the adhesion promoter between very oily and resinous timber and the sealant which strongly raises the life span of the joint. Preliminary tests are recommended.

Processing

- Can be applied directly from the cartridge / bag using a suitable caulking gun (manual, air, battery)
- Cut the nozzle tip according to the joint width Merbenit DC25 is filled slightly overflowing into the joints. The overflowing material is smoothed with a spatula. After 2 days the freshly sealed deck can be grinded. Grind in joint direction. Grain of the sandpaper: 80 120.

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

Colours

- black
- other colours on request

- Cartridges of 310 ml in boxes of 12 units
- Sausages of 600 ml in boxes of 12 units

Shelf life and storage conditions

- 15 months from date of production in original 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.

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