



Technical Data Sheet SiMP-Seal Teak 680
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SiMP-Seal Teak 680

**Watertight, saltwater and UV resistant
one-part SiMP teak deck sealant**

DESCRIPTION

SiMP-Seal Teak 680 is a watertight, saltwater and UV resistant one-component, low viscosity paste SiMP – Silyl Modified Polymer joint sealant for traditional marine timber decking. It cures under the influence of atmospheric moisture to form a caulk with excellent weather and salt/fresh water resistance and UV stability. Bubble-free curing, it is suitable for applications involving humid wood/teak. Solvent- and isocyanate-free.

AREAS OF APPLICATION

SiMP-Seal Teak 680 is versatile and performant sealant for all marine wood and teak decks sealing applications in marine pre-assembled or on board built. Suitable for sanding after curing with no staining of the deck.

FEATURES

- SiMP Silyl-Modified Polymer
- Solvent and isocyanate free. Completely odorless
- Excellent resistance to ageing and weathering.
- Completely color stable
- Easy to gun with excellent tooling consistency
- Permanently flexible over a wide range of temperatures
- Long term resistance against fresh and salt water.
- No gas reaction – Bubbles free, no bulging and shrinking
- Permanently flexible in a temperature range of -40°C to $+100^{\circ}\text{C}$.
- Can be sanded after curing.



TECHNICAL DATA

Appearance	Slightly thixotropic paste
Color	Grey, Black.
Chemical nature	SiMP – Silyl Modified Polymer
Curing Mechanism	Moisture-curing
Curing through volume [mm] (NPT Method 07) (24h - 23°C and 50% RH)	ca. 2.5
Hardness Shore A (DIN 53505)	ca. 48
Density [g/cm ³] (NPT method 06) (23°C and 50% RH)	ca. 1.40
Skin time [min] (NPT Method 17) (23°C and 50% RH)	ca. 25
Elastic modulus at 100% [N/mm ²] (ISO 37 DIN 53504)	ca. 1.8
Tensile strength [N/mm ²] (ISO 37 DIN 53504)	ca. 3.0
Elongation at break [%] (ISO 37 DIN 53504)	ca. 200
Application temperature [°C]	From +5 to +35
Temperature Resistance [°C]	From -40 to +100

APPLICATION

Perfect preparation and cleaning are necessary in order to guarantee a perfect adhesion of the SiMP-Seal Teak 680 on the sides of the joint. The seam must be clean, dry and free from dust or contaminating substances. Verify that the deck floor adhesive is completely cured before starting the sealing process.

For restoration of worn caulked seams, completely remove the old sealant. Re-clean again the surfaces which are to be bonded with a cutter. This in order to apply the new sealant to perfectly clean wood. Verify that the teak slats are dry and that their residual humidity content does not exceed 14%. An higher humidity level could affect the dimensional stability of the slats and put the sealant under an excessive mechanical stress, and eventually lead to the possibility of potential adhesion problems. Measure the atmospheric temperature and humidity, which during the application cycle, must be between 5°C and 35°C and between the 50% and 70% respectively.



Degrease the seams; for this activity some acetone or mek must be used. Use a clean cloth that must be renewed at regular intervals to avoid staining of the surfaces. After the degreasing of the seams leave the solvent to evaporate completely before the application of the U-Primer 199 DC. Apply with a brush a thin and even film of U-Primer 199 DC along the sides of the slats. Verify that the primer is applied evenly. Protect the treated area from dust and water and leave it to dry for 60 minutes in adequate conditions. The application of SiMP-Seal Teak 680 must take place within 24 hours from the application of the U-Primer 199 DC, otherwise it will be necessary to apply again the primer. Apply a backing tape to the base of the seam in order to avoid the “three-points bonding” of the sealant.

Cut the nozzle to fit in the seam to a width slightly smaller than the one of the seams. Extrude the sealant from the bottom to the top of the seam in order to prevent the formation of cavities and bubbles. Over-fill the seams to about 2mm with the sealant. Smoothing of the sealant is necessary. The product is completely free from shrinkage effects. If there is an interruption of the application procedure, be careful, when the application work restarts, that there is no gap (or break) between the sealant beads. Consequently, extrude the new sealant in the one previously applied. Protect the caulked seams from rain and sun irradiation for at least 12 hours.

After a period of 7 days, you can safely walk on the deck area and complete the sanding or abrasion process. Remove the excess sealant with the specific chisel for the purpose. Sand the deck with a sweeping movement along the length of the slats. Give the movement a maximum angle of 45° along the length of the staves. Never sand the deck perpendicular to the staves.

Finishing applications with paints or lacquers are not advised. Their use can compromise the adhesion and/or rheological properties of the sealant. It is absolutely necessary to ask for the support of our technical department. For the cleaning of the boat deck, use exclusively fresh or salted water, adding if necessary, only neutral soap. In order to prevent any damage to the boat deck, we advise you to use a non-metallic brush. Do not use air compression cleaners or rotating brushes.

CLEANING OF EQUIPMENT AND PERSONAL PROTECTIVE MEASURES

Clean the tools used with acetone or solvent. When the adhesive has not yet hardened, it can be removed using paper or a cloth. Once hardened, the product can only be removed mechanically. Avoid skin contact by using latex, rubber or polyethylene gloves. If it comes in contact with the skin, remove immediately and wash with soap and water.

PACKAGING

Foilpack 600ml – 20 pieces per box



STORAGE AND SHELF LIFE

SiMP-Seal Teak 680 can be stored for 12 months in its original packaging (unopened container) between 10°C and 25°C in a cool, dry place. The storage temperature should not exceed 25°C for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

GENERAL INFORMATION

The information contained in this technical data sheet is to the best of our knowledge correct, being based on our knowledge and experience to date and cannot be used as a guarantee, due to the various different materials present on the market and the fact that the application conditions are not under our direct control and supervision. NPT srl, however, guarantees constant product quality. NPT srl, has the right to modify or up-date this technical data sheet according to requirements. Customers are kindly requested to verify that they are in possession of the latest version.

ALWAYS CONSULT THE MATERIAL SAFETY DATA SHEET BEFORE USING THE PRODUCT