



SiMP-Seal 640

One-part SiMP elastic adhesive and sealant
Free of solvent and isocyanates

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Description

SiMP-Seal 640 is a one-component, gun-grade, non-sagging SiMP – Silyl Modified Polymer elastic adhesive and sealant. It cures under the influence of atmospheric moisture to form a high performance, permanently flexible elastic adhesive. Solvent- and isocyanate-free, it has not VOC.

SiMP-Seal 640 is a powerful and versatile elastic adhesive and sealant for use in tough elastic bonding applications in construction and industrial assembly, automotive, transportation (coach, caravan, refrigerated vehicles, containers) and marine, where a tough flexible rubber joint or powerful elastic adhesive is required.

Compliant to:

IMO FTPC Parts 2+5

Areas of Application

- Sealing and bonding between different materials
- Elastic bonding between metal, plastic, glass and other materials
- Sealing joints in vertical and horizontal applications
- Metal roof and gutter sealing
- High mechanical/dynamic stress resistance – shock/impact resistance
- Increase torsional stiffness of final assembly
- Vibration and sound damping bonding

Advantages

- Environmental friendly, free of isocyanates and solvents, no hazard symbol
- No bubble formation - Odorless
- Permanently flexible over a wide range of temperatures
- Non-sag, exceptional thixotropy and short cut-off string
- No change in volume – No shrinkage
- Easy to gun with excellent tooling consistency
- Excellent primerless adhesion on all typical construction and industrial materials and substrates
- Non-staining. Neutral behavior, does not attack support surface
- Excellent resistance to ageing and weathering; color stable and non-yellowing
- Over-paintable with many water and solvent based paints (preliminary tests recommended)



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Technical data

Appearance	Non-sag thixotropic paste
Colour	Grey
Chemical nature	SiMP – Silyl Modified Polymer
Curing mechanism	Moisture-curing
Curing through volume [mm] (NPT Method 07) (24h - 23°C and 50% RH)	ca. 2,1
Shore A hardness [N/mm ²] (DIN 53505)	ca. 55
Density [g/cm ³] (NPT method 06) (23°C and 50% RH)	ca. 1,53
Tack-free time [min] (NPT Method 17) (23°C and 50% RH)	ca. 10
Elastic modulus at 100% [N/mm ²] (ISO 37 DIN 53504)	ca. 1,3
Tensile strength [N/mm ²] (ISO 37 DIN 53504)	ca. 2,1
Elongation at break [%] (ISO 37 DIN 53504)	ca. 300
Application temperature [°C]	from +5 to +40
Temperature resistance [°C]	-40/+90

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Application

Surfaces must be clean, dry, free of water, oil, grease or rust and of sound quality. Remove all loose particles or residues with a jet of compressed air, sandpaper or hard brush. Glass, metal and other non-porous surfaces must be free of any coatings and wiped clean with solvent. Pre-cast panels using form-release agents other than polyethylene film must be sandblasted or mechanically abraded and dust free. Pre-test substrates for adhesion. Cleaners and/or primers may be required to achieve optimal adhesion. SiMP Seal 640 may be over-painted, however due to the large number of paints and varnishes available we strongly suggest a compatibility test before application. The drying time of alkyd resin based paint may increase.

Cleaning of equipment

Clean tools with acetone or alcohol immediately after use. Cured material can only be removed mechanically.





Personal protective measures

Use in a well ventilated place. If skin contact occurs, remove immediately and wash with soap and water.

Packaging

PE-cartridge 290 mL
Alu- bags 400 mL
Alu-bags 600mL
Drums 30Kg

Storage

SiMP Seal 640 can be stored for 12 months in its original packing (unopened container) at 5°- 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

