Technical Data Sheet

Date of issue: 27.03.2023 Revision no: 6 NP 1® Construction

NP 1[®] Construction

PRODUCT CHARACTERISTIC

- ✓ SMP (silane modified polymer) based adhesive and sealant
- ✓ Curing by humidity in the air
- ✓ One-component
- ✓ Ready-to-use
- ✓ CE Certification according to EN 15651-1 and EN 15651-4
- ✓ According to EN 15651-1 and EN 15651-4 type F EXT-INT (interior and exterior facade) and type PW EXT-INT (interior and exterior pedestrian walkways), class 25HM

FEATURES

- ✓ Waterproof
- ✓ Jointing and gluing
- ✓ Paintable with most water and solvent based paints
- ✓ Bonds without primer on almost all materials used in construction industry
- ✓ Excellent UV, weather and to aging resistance
- ✓ Bonds also with slightly moist surfaces
- ✓ Solvent- and isocyanate-free and odorless
- ✓ Does not cause any corrosion on metals
- ✓ Extremely strong and permanently elastic
- ✓ No discoloration
- ✓ No loss of volume and bubble formation
- ✓ Good resistance to fungi's

TECHNICAL SPECIFICATION		
Base	Silane modified polymer	
Curing system	By humidity in the air	
Number of components	1	
Skin formation time (23°C and 50% R.H)	30min	
Curing speed (23°C and 50% R.H)	2.5mm / 24h	
Density	1.45 g/cm ³ ± 0.02	
Solvent & isocyanate content	0%	
Shore A hardness (DIN 53505)	45 ± 5	
Elastic recovery (ISO 7389)	≥ 70	
Joint movement capability (ISO 11600)	±25%	
Modulus at 100% elongation (DIN 53504)	0.75 N/mm ²	
Elongation at break (DIN 53504)	470%	
Modulus at break (DIN 53504)	2.10 N/mm ²	
Processing temperature	(+5) – (+40) °C	
Shelf life (with original packing in dry conditions between +5 - +25°C)	12 months	
Temperature resistant	(-40) – (+90) °C	

^{*} Technical data are approximately provided for +23°C and 50% relative humidity.



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AREAS OF APPLICATIONS

- ✓ Construction materials such as aluminum, galvanized and stainless steel, zinc, copper, HPL panels, glass, natural stones, various synthetic materials, etc.
- ✓ Interior and exterior façade applications
- ✓ Indoor and outdoor floor applications
- ✓ Universal adhesive in the sealing of horizontal (and vertical) movable and connecting joints. For wide joints to up to 50mm.
- ✓ Sealing of cracks and joints, in car, caravan, train and bus construction, in containers, in airconditioning installations, jointing and gluing work in veranda's, bathrooms, kitchens, etc.
- ✓ All jointing where flexibility is important. Sealing between frame and wall, connecting joints of window/door frames, in facades and shop fronts
- ✓ Sound proofing between concrete and drain pipes
- ✓ Attaching and sealing of skirting boards, steps, doorsteps, protective profiles, fixing of covers, prefab elements...

METHOD OF USE

Preparation

The application surface must be fixed and rigid enough. It may be slightly damp. It should be clean, grease- and dust-free.

The materials to be joined must be clean. They should be grease- and dust-free.

If necessary, MEK, alcohol, or ethanol can be used for degreasing and cleaning the application surface.

Primer

It is user's responsibility to check the compatibility of the product for their application.

Primer is recommended for some surfaces.

If necessary, technical support could be supplied about primers for specific applications.

Application

Using as adhesive:

- ✓ Apply NP1 cartridge with the supplied nozzle in strips or dots to the materials to be bonded by MayGun or a sealant gun. The tip of the nozzle can be cut as needed for application.
- ✓ NP1 sausage comes with its own nozzle that can be cut as needed for application. Apply it with MemoGun or a sausage sealant gun.
- ✓ If strips are applied they should be applied in vertical rows. Also, they should be applied parallel to each other. This is important to allow the humidity to reach out the entire adhesive applied.
- ✓ Put together the parts to be joined as quickly as possible, averagely in 15min. (This will be depending on the temperature and relative humidity). The materials still will be adjustable at this stage.
- ✓ After adjusting push down the materials to be attached to each other. If necessary, use a rubber hammer.
- ✓ It is advised to have a gap of 3.2 mm between the parts to be bonded spacer blocks or pieces of foam tape may be used), to allow the adhesive to smooth out any distortions (especially important in exterior use or under humid conditions).
- ✓ If the adhesive layer does not have to take up any, or only has to take up a slight mutual distortion between the joining parts, a thinner adhesive layer (at least 2.0 mm) will suffice (for example in interior applications).

Using as sealant:

- ✓ Use a self-adhesive tape or foam tape to prevent triple-sided bonding around the joints on the application area.
- ✓ The joints should be filled without gaps.
- ✓ The sealant depth of the movable joint should amount to approx. 2/3 of the joint width. If the



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joints are too deep should be filled with suitable filler foam (PE or PU-filler foam) as back-up filling material.

✓ The sealant should be applied deep for the floor joints are subjected to high mechanical load. The sealant should only bond at the sides of the joint.

Joint Dimensions:

Joint width	Joint depth	Acceptable variance
6 mm	6 mm	± 1 mm
8 mm	6 mm	± 1 mm
10 mm	6-8 mm	± 2 mm
15 mm	10 mm	± 2 mm
20 mm	10-12 mm	± 2 mm
25 mm	15 mm	± 3 mm

Tooling

Rubber sealant smoothing tool can be used for smooth finishing.

Cleaning

Adhesive residue can be cleaned with alcohol or white spirit on application areas or on tolls while it has not cured yet.

It can be removed only mechanically after cured.

Painting

Paintable with most water- and solvent-based paints.

Paint can be applied after 48 hours adhesive applied. The surface first must be cleaned before it can be painted.

Alkyd paints require an extended drying time.

Because of many different paint options and qualities, users should test their own application on cured sealant.

LIMITATIONS

- ✓ Joints that are exposed to constant submersion under water and rooms with permanent high relative humidity
- ✓ Joints with a width or depth < 5 mm
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- ✓ Gluing PE, PP, PA and Teflon®. The adhesion and compatibility with plastic materials should be tested.
- ✓ Proper ventilation during processing and hardening is important.
- ✓ Opened cartridges and sausages should be consumed as quickly as possible.

PACKING AND COLORS

Cartridge: 25 cartridges of 290 ml/box - 60 boxes / pallet

White Ral 9016, Cream Ral 1013, Limestone Ral 7004, Aluminum grey Ral 7005, Tan, Redwood Tan Ral 8025, Terracotta, Anthracite Ral 7016, Black Ral 9011

Sausage: 20 sausages of 600 ml/box - 40 boxes / pallet

Other colors are available on request (2 pallets or multiplies)

HEALTH AND SAFETY

For health and safety instructions please refer to safety data sheet which is available on request.

This technical data sheet replaces all previous editions. All advices, figures and safety directives in this document are based on our careful research and last laboratory reports. Although, the document was compiled with the greatest care, because of a wide variety of different substrates and applications and possible different processing conditions **YOLDAS ENDUSTRI** does not accept responsibility for obtained results. Users need to ensure that the product is suitable for their application before use. Our general sales conditions apply. **YOLDAS ENDUSTRI** reserves all rights to modify the products without prior notice.

