Technical Data Sheet

Date of issue: 27.03.2023 Revision no: 6

NP 1[®] Automotive

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PRODUCT DESCRIPTION

NP1 Automotive is a single-component, moisture-curing, high-modulus, Silane Modified Polymer (SMP) based sealant and adhesive material. It is especially developed for use in the automotive sector for bonding and sealing in the manufacturing of vehicles such as cars, caravans, buses, and similar vehicles. It is a high-quality product that adheres to clean, dry, oil-free, and dirt-free surfaces without the need for a primer. This includes surfaces such as sheet metal, painted metal, aluminium, stainless steel, zinc, copper, various synthetic materials, wood, glass, plastic, enamel, and ceramics.

CHARACTERISTICS

- ✓ Cures quickly and provides excellent adhesion
- √ Has high mechanical strength
- √ Waterproof
- √ Odourless and neutral
- ✓ Easy to apply, does not require a primer
- √ Can be painted
- √ Can be used for bonding applications on slightly damp surfaces
- ✓ UV resistant and durable against aging
- ✓ Does not sag or flow
- √ Free of solvents and isocyanates; environmentally friendly.
- √ No volume loss or bubble formation
- √ Non-sticky
- √ The color does not fade over time
- ✓ Provides very strong and durable elasticity
- ✓ Does not cause corrosion on metals
- ✓ Resistant to temperatures from -40°C to +90°C
- ✓ Suitable for both indoor and outdoor use

Technical Specifications

Chemical Base : Silane Modified Polymer (SMP)

Curing Mechanism : Cures with moisture in the air

Components : One-Component

Tack Free Time (minutes, 23°C / 50% R.H.) : 10 min.

Skin Formation Time (minutes, 23°C / 50% R.H.) : 30 min.

Curing Rate (23°C / 50% R.H.) : 2.00 mm / 24 hours

Density (g/cm³) : 1.45 ± 0.02

Solvent & Isocyanate Content (%) : 0

Shore A Hardness (DIN 53505) : 50 ± 5

100% Elongation Modulus (DIN 53504) : 0.80 N/mm²

Elongation at Break (DIN 53504) : 800 %

Modulus at Break (DIN 53504) : 2.00 N/mm^2 Application Temperature (°C) : (+5) - (+35)

^{*}Technical information are approximate values at +23°C and 50% relative humidity.



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USAGE AREAS

- ✓ In the automotive sector: for body construction of cars, caravans, trucks, buses, and similar vehicles, as well as for all types of bonding applications.
- ✓ In the maritime industry: for ship sheet metal joints.
- ✓ For all types of metal sheet joint connections.
- ✓ In the manufacture of containers and tiny houses.
- ✓ In the production and assembly of car bodies.

SURFACE PREPARATION AND APPLICATION

Surface Preparation

- All surfaces to be applied must be clean, dry, and free from oil and dust.
- The application temperature should be between +5°C and +40°C.
- ethanol can be used to remove oil and dirt from the application surface.
- Adhesion should be tested on a small area before full application.

Application Method

- NP1 Automotive is suitable for use with manual or air pressure gun. It can be applied with MayGun cartridge guns.
- The materials should be brought together within the skin formation time, which may vary depending on the ambient temperature and humidity.
- Position the parts to be joined correctly and press them to ensure that the adhesive between the material and the surface is approximately 2.0 mm thick.

CLEANING

- Clean all tools and application equipment immediately after use. Uncured mastic residues can be cleaned with alcohol or thinner.
- Once the product has fully cured, it can only be removed mechanically.

APPLICATION CONDITIONS / LIMITATIONS

- Adhesion to PE, PP, PA, and Teflon, as well as compatibility with plastic materials, should be tested.
- Opened cartridges and sausages should be used as quickly as possible.
- A small test should be conducted before starting any painting application.



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Elastic NP 1[®] Automotive

PACKAGING & STORAGE

Shelf Life: 12 months from the date of production if stored in original, unopened, undamaged packages. Storage Conditions: Should be stored in a dry, cool environment at temperatures between +5°C and +25°C, in the original, unopened, and undamaged packaging.

Packaging Size Quantity in Box

NP 1 Automotive Cartridge 290 ml 25

HEALTH AND SAFETY INFORMATION

Refer to the Safety Data Sheet for all health and safety instructions, including information on storage and disposal. These documents are provided by the manufacturer upon request.







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Disclaimer

This technical information document supersedes all previous technical documents, statements, and label information. All recommendations, values, and safety information in this document are based on thorough research and the latest laboratory reports. Due to the variety of materials, application types, and conditions, we are not able to control or assume responsibility for the correct application of our products. Users should ensure that the product is suitable for their specific applications before use. Our general sales conditions apply. YOLDAŞ ENDÜSTRİ reserves the right to make changes to the products without prior notice.

