

Technical Data Sheet POLIFLEX 550 METAL Ver. 5.1 September 2023

# **POLIFLEX 550 METAL**

# Medium-modulus polyurethane adhesive

# DESCRIPTION

Poliflex 550 Metal is an elastic, single-component polyurethane adhesive sealant for numerous applications. It cures under the influence of atmospheric humidity to form a high-performance elastic adhesive with permanent elasticity and resistance to aging and weathering.

Certified according to: EN 15651-1 / 4 TYPE F INT / EXT / PW INT / EXT

**Tested according to:** ISO 11600 Type F Class 25 subclass HM LEED iEQc 4.1 Rule SCAQMD 1168 BAAQMD Reg 8 Rule 51

# **APPLICATION FIELDS**

Suitable for sealing pre-painted metal sheet, stainless or galvanized steel, copper and metals in general. It is capable of adhere to glass, wood, concrete and various rigid-type plastics. It is paintable with most most enamels except alkyd enamels. 600-mL bag marked NPT U-SEAL 500.

## **FEATURES**

- Special for joints between sheets
- Good adhesion even on porous materials
- Overpaintable
- Permanently elastic; allows ± 25% joint movement
- Good thixotropy; does not pour
- Excellent adhesion without primer on all typical construction and industrial materials
- Non-staining. Neutral cross-linking, does not attack surfaces

NPT Srl Production and R&D Via Stazione, 12 Villanova d'Ardenghi (PV) - Italy T +39 0382400140 1



## **TECHNICAL DATA**

Appearance	Thixotropic paste without pouring
Colour	White, black and grey
Chemical nature	Hygro-hardening polyurethane
Specific weight [g/cm <sup>3</sup> ] (NPT Method 06) (23°C and 50% RH)	ca. 1.33
Hardness SHORE A (DIN 53505)	ca. 38
Skin time [min.] (NPT Method 17) (23°C and 50% RH)	ca. 50
Curing through volume [mm/24h] (NPT Method 07) (24h - 23°C and 50% RH)	ca. 2.3
Elastic modulus at 100% [N/mm <sup>2</sup> ] (ISO 37 DIN 53504)	ca. 0.7
Elongation at break [%] (ISO 37 DIN 53504)	ca. 570
Tensile strength [N/mm <sup>2</sup> ] (ISO 37 DIN 53504))	ca. 1.7
Application temperature [°C]	from +5 to +40
Temperature Resistance [°C]	from -40 to +100
Joint movement capability (EN 15651/1; ISO 11600)	± 25 % of the width of the joint

#### APPLICATION

Adhesion surfaces must be perfectly clean, dry and free of dust and grease. Poliflex 550 Metal has excellent adhesive properties and does not require the use of primers on most common building materials. However, due to the variety of some unpredictable characteristics of these substrates, preliminary testing is recommended. For example, prefabricated panels using release agents other than polyethylene film should be mechanically sanded or abraded and free of dust. For easier use or application at low temperatures, it is recommended that the material be stored at a temperature of about 25°C before use. It is imperative that the sealant does not adhere to the bottom of the joint, so for proper application, it is necessary to place a closed-cell polyethylene cord (backing rod) at the correct depth. If necessary, apply an appropriate primer to the sides of the joint and observe the waiting time in order to prevent trapped solvent, under conditions of increased temperature, from creating bubbles in the sealant during curing. Extrude the sealant ensuring that it is in full contact with the sides of the joint. Smoothing and finishing should be done within the skin time of the sealant. Poliflex 550 Metal can be overpainted. The compatibility of the paint product must be tested for compatibility by conducting preliminary tests. Pay attention to the presence of

NPT Srl Headquarter Via Guido Rossa n.2 - Loc. Crespellano 40053 Valsamoggia (BO) - Italy T. +39 051969168 www.sigill.it NPT Srl Production and R&D Via Stazione, 12 Villanova d'Ardenghi (PV) - Italy T +39 0382400140

Organizzazione con Sistema di gestione qualità certificato **UNI EN ISO9001:2015 da CSI Spa** 

2



alcohol or alkyd resins, as they may interfere with the curing process of the sealant, increasing its timing. Do not apply in the presence of silicone sealants undergoing crosslinking. Since the system cross-links with moisture, allow sufficient exposure to air.

# **CLEANING OF EQUIPMENT AND PERSONAL PROTECTIVE MEASURES**

Clean used tools with alcohol. When the adhesive has not yet hardened, you can remove it from the spatula using paper or cloth. Once hardened the product can only be removed mechanically. <u>Avoid</u> contact with skin, possibly using latex, rubber or polyethylene gloves. In case of contact with skin <u>wash immediately</u> with soap and water.

#### PACKAGING

Cartridge 310 ml	12 pieces per box
Sausage 600 ml	20 pieces per box

# STORAGE AND SHELF LIFE

Can be stored for 12 months in the original packaging, in a cool, dry place (between 10°C and 25°C). Keep away from sources of moisture, heat sources and direct sunlight contact.

#### **GENERAL INFORMATIONS**

The information contained in this technical sheet represents the best of our knowledge. In in any case this document cannot be considered a guarantee of use, sector of use and application of the product in accordance with the instructions provided. The success of the application is outside the our control and depends on numerous factors. We decline any responsibility for the improper use of the product, the recommendations contained in this document should be considered guidelines general. If doubts remain, carry out preliminary tests. NPT Srl reserves the right to modify and update the technical data sheet without notice. Customers are kindly asked to check in possession of the most recent version.

ALWAYS CONSULT THE MATERIAL SAFETY DATA SHEET BEFORE USING THE PRODUCT

NPT Srl Production and R&D Via Stazione, 12 Villanova d'Ardenghi (PV) - Italy T +39 0382400140

Organizzazione con Sistema di gestione qualità certificato **UNI EN ISO9001:2015 da CSI Spa**