

# NEXA MASTIC PU

Low modulus polyurethane sealant for sealing active joints and cracks, ideal for use in high humidity conditions

## Description:

NEXA MASTIC PU is a low-modulus elastic sealant designed for active expansion joints. It is specially formulated to prevent bubble formation during curing, even under high temperature or high humidity conditions. The product exhibits excellent thixotropy, making it suitable for large expansion joints. It cures with ambient humidity, forming an elastic sealant with a 50% movement accommodation factor and exceptional adhesion and bonding properties. It performs well on problematic surfaces such as aluminum, iron, and polycarbonate. UV-resistant versions are available (non-UV-resistant versions also available).

## Approved Uses

Waterproofing and protection of:

- Sealing of active joints and cracks, regrouting of concrete surfaces, joints in concrete slabs, prefabricated panels, and work on brick or blocks, marble, and granite.
- Water tanks, channels, underground walls...
- General industrial sealing, in the automotive or glass industry, sealing in ventilation units, air conditioners, door frames, metal or aluminum panels or windows, tanks...

## Limitations

- Don't apply on unsound substrates.
- On very porous substrates, such as sandy or poorly compacted concrete, bubbles may appear. It is recommended to properly seal the surface with NEXA PRIMER PU.
- Generally, it allows repainting, but we recommend a preliminary test.

## Advantages

- Curing without bubbles under severe climatic conditions.
- Excellent thixotropy.
- Excellent adhesion on almost all substrates, with or without the use of special primers.
- Excellent workability and gun extrusion even at low temperatures.
- High chemical resistance, suitable for joint treatment in pools and chemically treated water (check suitability according to chemical product, purity percentage, and water temperature in °F/°C).
- Low modulus of elasticity with a 50% movement accommodation factor.
- Great resistance to fungi and microorganisms.
- Allows possible application underwater.
- Excellent heat resistance, suitable for applications with exposure to temperatures >140°F (>60°C).
- The product is cold-resistant and remains elastic at temperatures below -40°F (-40°C).

## Application

- Requires a smooth, clean, and as solid a substrate as possible without traces of oils, greases, silicones, or contaminating waxes.
- For most applications, primers are not necessary, but adhesion tests are recommended. For very porous substrates, seal with NEXA PRIMER PU to prevent bubble formation.
- Create a joint bellows and base to control the sealing depth.
- Apply the product, ensuring that air does not get trapped in the joint.
- Handle immediately after application.
- For proper application, the width/depth ratio should be 2:1 at a minimum depth of 0.39 inches (10 mm).
- Curing is approximately 0.08-0.12 inches/day (2-3 mm/day).

## Consumption

### Linear Consumption (20.3 oz / 600 cc sausage)

Depth \ Width	0.20 in (5 mm)	0.39 in (10 mm)	0.59 in (15 mm)	0.79 in (20 mm)	0.984 in (25 mm)
0.20 in (5 mm)	0.94 in 24 m	0.47 in 12 m			
0.39 in (10 mm)			0.16 in 4 m	0.12 in 3 m	0.094 in 2,4 m
0.59 in (15 mm)					0.063 in 1.6 m

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## Cleaning

- The tools will be cleaned immediately after use with paper and then with solvent. Under no circumstances is reused for mixing or applying with polyurethane products.

## Presentation

20.3 oz sausages (600 cc) - Packaged in boxes of 20 units.  
10.1 oz cartridges (300 cc) - Packaged in boxes of 20 units.

## Colors

Gray and white.

## Container Stability

12 months in a dry place between 41°F to 77°F / 5 °C a 25 °C.

## Transportation, Preventive measures and Storage

Refer to the safety data sheet.

*The information provided serves as a recommendation based on laboratory tests and our current knowledge. Different conditions on construction sites may result in variations from the given information; therefore, our warranty is limited to the supplied product. For any questions, please contact our technical department.*

## Technical data of the liquid product

CONCEPTS	RESULTS
Density	90.6 lb/ft³ (1.45 g/cm³)
Hardness	Shore A +-27
Service Temperature	-40 a 176°F (-40 °C a +80 °C)
Drying to the touch 77°F (25 °C)	+ 2 hours
Curing time	0.08-0.12 pulgadas/día (2-3 mm/día)
Elongation at break	>700%
Modulus at 100% elongation	43.5 psi (0.3 N/mm²)
Recovery	>90%
Toxicity	No restrictions once cured
QUV Weathering Resistance Test (4 hours UV, at 140°F (UVB lamp) & 4 hours COND at 122°F/ 50°C)	Passed (after 2000 hours)
Thermal Stability (100 days at 176°F / 80°C)	Passed
Adhesion to concrete	284.5 psi (>20 kg/cm²)
Hydrolysis (H2O, 30 days-cycle 60- to 212°F / 100°C) Hydrolysis (8% KOH, 15 days at 122°F / 50°C) Hydrolysis (HCl pH=2, 10 days at RT)	No significant changes in elastomeric properties
Adhesion to concrete	>285 psi (>20 kg/cm²) (>2 MPa)

## Application requirements

ESSENTIAL CHARACTERISTICS	RESULTS	HARMONIZATION STANDARD
Tensile properties after prolonged immersion in water (28 days)	NF	EN ISO 10590
Tensile properties after prolonged immersion in saltwater (28 days)	NF	EN ISO 10590
Adhesion/cohesion properties after exposure to heat, water, and artificial light through glass	NF	EN ISO 11431

## En 15651 - Part1 & Part 4

ESSENTIAL CHARACTERISTICS	RESULTS	HARMONIZATION STANDARD
Fire Reaction	Class E	EN ISO 11925-2
Elasticity Recovery (%)	>70%	EN ISO 7389
Flow Resistance	<0.118 in (<3 mm)	EN ISO 7390
Tensile Strength - Secant Modulus at 73.4°F (23°C)	<58 psi (<4 MPa)	EN ISO 8339
Tensile Strength - Secant Modulus at -22°F (-30°C)	<130 psi (<9 MPa)	EN ISO 8339
Tensile Strength in Sustained Extension	NF	EN 8340
Adhesion/Cohesion Properties at Variable Temperatures	NF	EN ISO 9047
Mass/Volume Loss	<10%	EN ISO 10563
Tensile Properties in Sustained Extension after Immersion in Water (4 days)	NF	EN ISO 10590
Traction Force (50% movement capability)	NF	EN ISO 8340

For more information about our products and systems, as well as technical documentation downloads or safety data sheets, please visit our website or contact us.

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