# TECHNICAL DATASHEET NYXON SPECIAL GLUE



#### PRODUCT DESCRIPTION:

NYXON SPECIAL GLUE is a 1-component, permanently elastic, fast curing sealant/adhesive, based on innovative Hybrid Technology, for indoor and outdoor applications.

NYXON SPECIAL GLUE is engineered for a wide range of sealing and bonding applications, with a completely weather resistant, neutral and odourless curing.

NYXON SPECIAL GLUE has minimal health and safety considerations because does not contain solvents, silicones or isocyanates.

#### **MAIN BENEFITS:**

- High performance mechanical properties.
- Fast curing. Nearly no shrinkage.
- Can be applied to damp surfaces.
- Excellent adhesion to a wide range of materials.
- Very good UV-, weather and ageing resistance.
- Silicone, isocyanates and solvent free.
- Non-corrosive.
- Easy to apply, even in adverse conditions and low temperatures.
- Permits painting, with water based paints and many other systems (to be tested).

#### **FIELDS OF APPLICATION:**

- Multipurpose sealing and bonding in the building sector, even onto humid and damp surfaces.
- Connection low movement wall joints (horizontal and vertical), e.g. joints between window or door frames and brickwork, for stairs, balconies, etc.
- Suitable of installing (sealing and bonding) of windowsills, skirting boards, covering boards, etc.
- Elastic bonding and sealing in many different industrial applications.
- Joints in ventilation & air-conditioning ductwork.
- Bonding in vibrating constructions (vehicle body, containers, metal-to-metal, ...).

#### PACKAGING INFORMATION:

This product is available in 600 ml sausages. Other packaging is available under request.

#### **COLOURS INFORMATION:**

White, grey and black. Other colours are available on special order.

#### STORAGE:

The shelf life is 12 months in the original unopened packaging, in dry conditions and protected from direct sunlight at temperatures between +5°C and +25°C.

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#### **TYPICAL TECHNICAL DATA:**

Basis:		Hybrid polymers
Consistency:		Non-slump paste
Specific gravity:	(ISO 2811-1)	Approx. 1,52 g/ml
Tack free time:	(OQ.06-internal)	5 minutes (at 23°C; 50% R.H.)
Skin forming time:	(OQ.16-internal)	Approx. 35-45 minutes (at 23°C; 50% R.H.)
Curing rate:	(OQ.18-internal)	Approx. 3 mm/24 hr.
Resistance to flow:	(ISO 7390)	0 mm (at 5ºC and 50ºC)
Movement capability:	(ISO 9047)	±20%
Shore A hardness:	(ISO 868)	Approx. 50
Application temperature:		Between +5°C to +40°C
Service temperature:		-40ºC to +90ºC
Tensile properties:		

### ISO 37 (2mm thickness, S2 dumbbells, 7 days 23°C;50% R.H.)

E-Modulus 100%	1,40 MPa
Tensile strength	2,00 MPa
Elongation at break	200,00%

These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. The time until complete curing may be extended at lower temperature, lower humidity or increasing film thickness.

#### **DIRECTIONS FOR USE:**

Surface preparation and sealant application:

#### A. Cleaning and joint preparation:

Substrates (joint flanks) must be clean, and free of dust, grease and other contaminant which may affect the adhesion. Non- porous surfaces (such as aluminium, glass, etc.) should be cleaned with a suitable solvent. Porous substrates (such as concrete, brickwork, etc.) must be mechanically cleaned from loose particles. Mask off the joint edges.

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#### **B. Primer:**

NYXON SPECIAL GLUE adheres to most common construction materials without primer. However, a preliminary adhesion test is recommended on every surface. Sometimes, it may be necessary to treat the joint surfaces with a primer to obtain better adhesion performances. Please, contact us for technical assistance.

#### C. Inserting backing material:

Use the closed cell polyethylene backer foam as a back-up material to limit the sealant joint depth and avoid the sealant to adhere to the joint base. Choose the right backing strip diameter (at least 25% wider than the joint width).

#### D. Sealant application:

After substrate preparation, apply the sealant with a professional caulking gun, evenly and without bubbles. Observe the eventually used primer's open time before filling the joint.

#### E. Tooling and finishing:

The joint should be tooled and smoothed before skin formation. Press the sealant and smooth it ensuring good contact with the surfaces to seal. Use a spatula or neutral soapy water as a tooling agent. Remove masking tape. Uncured product may be easily removed with solvents such isopropyl alcohol or "white spirit". Cured sealant must be removed mechanically.

#### Remarks:

Do not use NYXON SPECIAL GLUE on bituminous substrates or on building materials which might bleed oils, plasticizers or solvents (e.g. natural rubber, chloroprene, EPDM, ...).

There is no adhesion to PE, PP, PTFE (Teflon®). Due to the wide variety of possible substrates, we recommend a preliminary compatibility test.

Paintability: Due to the large number of paints and varnishes available we strongly suggest a compatibility test before application.

Not intended for structural glazing.