

QuickFill NS - 2K JOINT FILLER – THIXOTROPIC

POLYUREA

1. Characteristic:

QuickFill NS is a low viscosity and flexible 2-part, 100% solids Filler for Interior Control Joint Applications and Crack Repairs on concrete derived from a reaction of an Isocyanate and a Polyurea resin blend. This thixotropic material has been especially designed for interior vertical applications requiring a slower set time. It is used for rapid installations in control joints and can be sprayed as a membrane for specific applications. It penetrates into fractures of joints preventing water intrusion and sub-base damage. It is an excellent maintenance tool and it seals against most fluids and other contaminants. After cutting it will produce a smooth surface that will extend the life of concrete and reduce maintenance expenditures.

2. Features:

- **Thixotropic behaviour, high regulation action and non sag properties**
- **Basically for Indoor-Applications**
- Immediate repair, drive over in 60 minutes
- Meets USDA requirements, VOC free, 100% solids
- High tensile strength and elongation
- Interior Control Joints
- Stays flexible even in extreme cold conditions
- Not sensitive to moisture
- 100% Polyurea, low color change
- Resistant Chemicals Fuels, Oil and other contaminants
- Excellent abrasion- and high impact resistance

3. Typical Uses

- Cable Runs, Utility Cuts, Inductive Loops
- All Damages and Crack-Repairs on Concrete
- Control Joints, Interior concrete
- As slow set Spray Membrane
- Automobile and Aircraft Parking Zones
- Garage Decks, Concrete Docks
- Cold Storage Application
- Industrial Manufacturing Facilities
- 2K-Structure-Cement for special applications

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4. Processing properties:	Datas	
Mixing Ratio (A:B)	Comp. A to Comp. B = 100 : 100 per volume	
Recomended thickness [mm]	n.a.	
Numbers of layer	n.a.	
Gelification time at 20°C [min.]	1,5 – 2,0	
Tack.Free-Time at 20°C [min.]	4 - 5	
Hardness/Curing at 20°C	1 h: 80 – 90%	24 h: nearly 100%
Temperature range for application (ambience) [°C]	0 - +50	
Temperature range for application (substrate) [°C]	0 - +50	
Material Temperature of both components [°C]	> 20	
Maximal relative air humidity for application [%]	95 - 99	
Pay attention to the dew point limit	min. 3K > DP (dew point)	

5. Physical Properties:	Datas	
Chemical Base	-	Comp. A: MDI-Prepolymer Comp. B: Polyetheramine-Mixture
VOC-content	DIN EN ISO 11890-1 / ASTM D-1259	0%
Solids content	DIN EN 827 / ASTM D-2697	100%
Colour	-	Grey (other colours are possible on request)
Viscosity [mPa*s] @ 25°C	DIN EN ISO 2884-2 / ASTM D-4878	Comp. A: 500 - 900 Comp B: 600 – 1.200
Density [g/cm ³] @ 20°C	DIN EN ISO 2811-1 / ASTM D-1217	Comp. A: 1,12 ± 0,02 Comp. B: 1,05 ± 0,02
Density [g/cm ³]	EN ISO 1183 / ASTM	1,02 ± 0,02
Tensile strength [MPa]	ISO 37-2005 / ASTM D-638	≥ 8
Elongation at break [%]	ISO 37-2005 / ASTM D-638	≥ 200
Hardness [Shore A]	ISO 868-2003 / ASTM D-2240	85 ± 5
Hardness [Shore D]	ISO 868-2003 / ASTM D-2240	30 ± 5
Abrasion resistance [mg]	ASTM D-4060	< 10 (wheel CS17; 1000 g; 1000 cycles)
Peel off strength [N/mm]	ISO 813 / ASTM	Steel: ≥ 4 Concrete: ≥ 4
Max. Process temp. [°C]	ISO 11346 / ASTM D-2485	Wet: 60 Dry: 130 Peak temperature dry: 150
Storage conditions [°C]	DIN EN 12701 / ASTM	10 – 30 (in closed original drums, stored at dry and well ventilated place; beware of freezing)
Shelf life	-	12 months

*) All datas measured at 23°C @ 50%rH. Meanderings at different ambience- and processing parameters have to be taken into account.

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6. Hints for the application:

QuickFill NS can be applied with a double cartridge or mechanical with a 2K-spray equipment.

By the application with double cartridges (600 ml or 1500 ml) it have to be used in combination with special static mixer form VIP and further more also a manual or pneumatic dispensing gun.
The process of dispensing should be done completely and quickly avoiding any breaks, because the material can react immediately in the static mixer and then the discharge is blocked.

For application of greater areas it should be recommended a 2K-spray equipment (e.g. VIP-Squirt-System). Both components A+B have to be bring up to a processing temperature of about 20°C, which have to held in a constant range. The MDI-prepolymers should be protected against humidity and shall be not applied on wet surfaces.

The drying times depend naturally on the climate and environmental influences, e.g. ambient temperature, relative humidity of air and ventilation etc.

Therefore the times specified can only be used as guidelines. The exact times have to be determined by testing on site.

Aromatic Polyurea Coating Systems are UV-stable but are not color stable. The cured coating system may exhibit discoloration when exposed to sunlight. This does not influence the physical properties of the material!

Before using, shake or fluff the cartridges very carefully for approx. 5 min.; the shaking process have be done by continous and quick left-right-movement from the wrist joint.

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7. Form of delivery:

Product name	Unit	Ref.-No.
QuickFill NS Komp. A+B	600 ml (Double cartridge)	On Request
QuickFill NS Komp. A+B	1500 ml (Double cartridge)	On Request
QuickFill NS Komp. A+B	2 x 20 l (small drums)	On Request

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