

Neodur[®] Polyurea S

**Two-component, transparent aliphatic polyurea varnish,
ideal for the sealing of decorative stone carpets**

Description

Two-component, transparent aliphatic polyurea varnish, ideal for the sealing of decorative stone carpets

Fields of application

- Sealing of stone carpet (e.g. made of Neodur[®] Polyurea and quartz sand)
- Protection of micro-cement coatings
- As a final protective layer on industrial floors, metallic & cementitious surfaces, especially in seaside areas



Properties - Advantages

- Excellent resistance to UV radiation and adverse weather conditions, without yellowing
- Offers long-term protection to the stone carpet from water absorption, increases its wear resistance and facilitates significantly the washing of its surface
- Remarkable hardness and resistance to scratching
- High adhesion strength and resistance to abrasion and chemicals
- Retains its gloss over time

Packing

Set (A+B) of 8,75kg

Appearance (cured)

Transparent, glossy

Technical characteristics

Mixing ratio A:B (by weight)	3:2
Density (EN ISO 2811-1)	1,10kg/L ($\pm 0,05$)
Solids content by weight	~98%
Solids content by volume	~97%
Gloss (60°)	85

Abrasion resistance (Taber Test, CS 10/1000/1000, ASTM D4060)	24mg
Adhesion strength (EN 1542)	$\geq 2,5 \text{ N/mm}^2$
Scratch hardness (Sclerometer Test - Elcometer 3092)	14N
Resistance to temperatures (dry loading)	-30°C min. / +80°C max.
Consumption: 0,7-1kg/m² per layer for sealing of stone carpets with quartz sand of 0,6-1,2mm	

Application conditions

Substrate moisture content	<4%
Relative air humidity (RH)	<65%
Application temperature (ambient - substrate)	+10°C min. / +35°C max.

Curing details

Pot life (+25°C, RH 50%)	25 minutes
Dry to recoat (+25°C, RH 50%)	5 hours
Full hardening	~3 days

* Low temperatures during application and/or curing prolong the above times, while high temperatures and humidity reduce them

Instructions for use

Substrate preparation

The surfaces that are to be coated must be stable, clean, dry, protected from rising moisture, and free of dust, grease, oil, etc. Older layers of varnishes or primers must be fully removed and the surfaces must be fully cleaned by mechanical or chemical means. Depending on the substrate, proper mechanical preparation may be required to smooth out the irregularities, achieve an open texture surface and ensure the optimum bonding.

Application

The two components A & B are mixed in the predetermined ratio (3A : 2B w/w) and stirred for app. 3 minutes with a low speed electric stirrer until the mixture is homogeneous. The mixture is then left for approximately 5 minutes in the container and the surface of the decorative stone carpet is then covered by roller, brush, smooth trowel or squeegee.

Consumption of **Neodur® Polyurea S** as sealing layer: 0,70-1kg/m² for stone carpets with quartz sand of 0,6-1,2mm

In case of applying **Neodur® Polyurea S** as protective varnish on micro-cement coatings or other cementitious substrates, by roller, it is recommended to dilute it with solvent **Neotex® 1080** in a ratio of ~15 w/w. The second (and every potential subsequent layer) follows ~5 hours after the application of the previous one (depending on the atmospheric conditions)

Consumption of **Neodur® Polyurea S** as protective varnish: ~0,15-0,20kg/m² per layer

Special notes

- **Neodur® Polyurea S** should not be applied under wet conditions, or if wet conditions are expected to prevail during the application or the curing period of the product
- The components should not have been stored at very low or very high temperatures, especially before mixing. Mixing and stirring of the mixture should be preferably done in the shade. The stirring of the mixture must be done mechanically and not manually with a rod, etc.
- Excessive stirring of the material should be avoided, in order to mitigate the risk of air entrapment. After stirring the mixture, it is recommended to apply the material shortly in order to avoid the development of high temperatures and potential hardening inside the can
- The substrate temperature must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish
- **Neodur® Polyurea S** should not be applied on surfaces that have been pre-treated with water-repellent impregnation coatings (e.g. siloxane-based) or waxes
- **Neodur® Polyurea S** gives a “wet” look to the stone carpet and it is not recommended to apply it on stone carpets that are created exclusively with the use of light-coloured quartz sand. It is proposed to use on stone carpets that contain quartz sand of 2 or more different colour shades.

Appearance	Transparent, glossy
Packing	Set (A+B) of 8,75kg in metal cans
Cleaning of tools – Stains removal	By Neotex® 1021 or Neotex® 1080 or Neotex® PU 0413 immediately after application. In case of hardened stains, by mechanical means
Volatile organic compounds (V.O.C.)	V.O.C. limit acc. to the E.U. Directive 2004/42/CE for this product of category AjSB “Two-Pack reactive performance coatings”: 500g/l (Limit 1.1.2010). V.O.C. content of the ready to use product <500g/l
UFI code	<i>Component A:</i> U050-M09E-N00U-6VJU <i>Component B:</i> F5F0-S04W-E00T-YDWR
Storage stability	1 year, stored in its original sealed packing, protected from frost, humidity and exposure to sunlight

TECHNICAL DATA SHEET



The information supplied in this datasheet, concerning the uses and the applications of the product, is based on the experience and knowledge of NEOTEX® SA. It is offered as a service to designers and contractors to help them find potential solutions. However, as a supplier, NEOTEX® SA does not control the actual use of the product and therefore cannot be held responsible for the results of its use. As a result of continual technical evolution, it is up to our clients to check with our technical department that this present data sheet has not been modified by a more recent edition

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