

Neodur[®] Varnish Mat

Transparent two-component polyurethane mat varnish, with UV filters

Description	Transparent two-component solvent-based polyurethane mat varnish with UV filters, cured with aliphatic polyisocyanates, suitable for the protection and decoration of micro-cement coatings and various other construction surfaces
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Fields of application	<ul style="list-style-type: none"> • Protection and decoration of micro-cement coatings • Protection and decoration of cementitious and metallic surfaces, natural stone, polyester, industrial floors, epoxy and other resinous systems in interior and exterior areas
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Properties - Advantages	<ul style="list-style-type: none"> • Renders a mat finish of high hardness, with increased anti-slip properties • Protects against water absorption and enhances the mechanical strength of micro-cement coatings and several other substrates • Contains UV filters, offering long-term resistance to solar radiation and yellowing • Excellent adhesion properties on numerous surfaces • High resistance to chemicals (dilute acids, alkalis), abrasion and mechanical stress • High aesthetic result
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Technical characteristics

Mixing ratio A:B (by weight)	38:14
Gloss (60°)	19
Abrasion Resistance (Taber Test ASTM D4060, CS 10/1000/1000)	20mg
Adhesion strength (EN 1542)	≥2,5N/mm ²
Flexibility (ASTM D522, 180° bend, 1/8" mandrel)	Pass
Scratch hardness (Sclerometer test - Elcometer 3092)	8N
Skid resistance (EN 13036-4, wet surface)	25 (PTV)
Skid resistance (EN 13036-4, wet surface, with 2,5% w/w addition of Neotex[®] Antiskid M)	>50 (PTV)
Resistance to temperatures (dry loading)	-30°C min. / +80°C max.
Consumption	~125 gr/m ² per layer (on properly prepared surfaces)

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Curing details

Pot life (RH 50%)

Temperature	Time
+12°C	2,5 hours
+25°C	2 hours
+30°C	1 hour

Dry to recoat (RH 50%)

Temperature	Time
+12°C	36 hours
+25°C	24 hour

Walkability (RH 50%)

Temperature	Time
+12°C	36 hours
+25°C	24 hours

Total hardening

~ 7 days

Instructions for use

Surface preparation: The surface must be stable, clean, dry, protected from rising moisture and free of dust, grease and loose materials. Any poorly adhering materials and older coatings should be removed and the surface should be thoroughly cleaned mechanically or chemically. Depending on the substrate, appropriate mechanical preparation may be required, in order to smooth the irregularities, open the pores and create the optimum conditions for adhesion.

Priming: Especially in the case of a micro-cement substrate, it is advisable to prime the surface with the hybrid primer **Neodur[®] Varnish PR** diluted 25-30% w/w with water. This way, the natural appearance of the micro-cement coating is mostly maintained, without darkening its colour or creating a "wet" effect after the application of **Neodur[®] Varnish Mat**.

Mixing - Application: Components A & B are mixed at the predetermined ratio and stirred for app. 3 minutes with a low-speed electric stirrer until the mixture is homogeneous. The surface is then covered by roller or brush. The mixture should be left for app. 5 minutes and then, the varnish is applied by roller or brush in at least two layers. For enhanced anti-slip properties, it is recommended that the final layer of **Neodur[®] Varnish Mat** is applied after the product has been mixed 1,5-2,5% w/w with the anti-slip additive **Neotex[®] Antiskid M**.

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Notes

- *Application Conditions:* Substrate moisture content <4%. Relative air humidity <65%. Temperature: +12°C min. / +35°C max
- High atmospheric humidity may negatively affect the curing of the varnish. In the case of exterior applications, the application of the varnish must be postponed if rainfall or highly humid conditions are expected to prevail in the next 48 hours.
- **Neodur[®] Varnish Mat** should not be applied on surfaces where water-repellent impregnation materials (e.g., siloxane -based) have been applied in the past
- **Neodur[®] Varnish Mat** may be diluted with solvent **Neotex[®] 1021**

Cleaning and maintenance instructions

- In case of minor spills and stains, it is recommended to remove them as soon as possible by using a soft cloth along with warm clean water (temperature <+60°C)
- For the maintenance cleaning of the surface from dust and dirt, it is recommended to use a vacuum cleaner or a soft bristle broom. The use of hard brushes or wires to remove the stains should be avoided.
- For cleaning the surface from hardened stains, it is recommended to use a hard foam mop with a solution of water and ammonia (~3% dilution). Then, rinse off with clean warm water (temperature <+60°C) and dry the surface with a soft towel.
- In case of using commercial cleaning products, the use of neutral ones is recommended (pH between 7 and 10). Soaps or all-purpose cleaners containing water-soluble salts or harmful ingredients with high concentration in alkalis or acids should be avoided. Follow the manufacturer's recommendations with respect to the optimum dilution with water. In any case, the first time a commercial cleaning product is used, it is recommended that a trial is made in a small surface area.

Cleaning of tools – Stains removal

Immediately after the application with solvent **Neotex[®] 1021**. 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

A component: WP50-N0TM-300T-GM7C
B component: J8F0-80U9-R009-NRGT

Packing

Sets (A+B) of 15,6kg, 5,2kg and 1kg in metal cans

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Storage Stability

Component A: 2 years if kept in the original sealed packaging, protected from frost, humidity, and exposure to solar radiation.

Component B: 12 months if kept in the original sealed packaging, protected from frost, humidity, and exposure to solar radiation. Component B must be stored in an absolutely dry place protected from frost and humidity. In case of contact with ambient moisture it can be polymerized into the container

