

Neopox[®] Special

Product Description

Neopox[®] Special is a two-component solvent-based epoxy paint suitable for use on construction, metallic & GRP surfaces that undergo significant mechanical stress and need chemical resistance.

Fields of Application

- Floors of industries, warehouses, car services places
- Swimming pools, tanks, fountains, boats
- Indoor metallic and polyester surfaces

Properties/ Advantages

- Resistant at temperatures between -50°C and +140°C (short-term resistance). Permanent resistance between -20°C and +70°C.
- **Neopox[®] Special** doesn't pre-require the substrate priming. In special occasions it is required the use of **Epoxol[®] Primer** (see table below)

Type of substrate	Consumption Epoxol [®] Primer	Consumption Neopox [®] Special
Mosaic	100gr/m ² /layer	125gr/m ² /layer
Ceramic Tiles	100gr/m ² /layer	125gr/m ² /layer
Cementitious with high porosity	150-200gr/m ² /layer	125gr/m ² /layer

- Excellent resistance to water, sea water, alkalis, petroleum derivatives, industrial atmosphere and adverse weather conditions. Good resistance to solvents and dilute acids (see table of chemical resistance).
- Suitable and as a protective coating to biological purification plants.
- Widespread use of applications with the same material.
- Wide range of basic colours.

Compliant with the regulation 2004/42/EC for limitation of V.O.C. in paints and varnishes.

Technical Characteristics

Appearance	Gloss
Density (EN ISO 2811.01)	0,98-1,2 kg/l (depending on the shade)
Mixing ratios (weight prop.)	75A:25B
Gloss 60°	85-90

Neopox[®] Special

Consumption	250-350gr/m ² for two layers (depending on substrate)
Substrate Temperature	+12°C to +35°C
Ambient Temperature	+12°C to +35°C
Dry film thickness	60-80µm per layer
Surface humidity content	<4%
Relative atmospheric humidity	<70%
Total Hardening	~ 7 days
Abrasion resistance(ASTM D 4060)	57 mg (TABER TEST CS 10/1000/1000)
Bond strength (EN 13892-8)	≥ 2,5 N/mm ²
Flexibility	PASS (ASTM D522, 180° bend, 1/8" mandrel)

Pot Life

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

Overcoating

Temperature	Time
+12°C	36 hours
+25°C	24 hours
+30°C	24 hours

Walkability

Temperature	Time
+12°C	36 hours
+25°C	24 hours
+30°C	24 hours

Neopox[®] Special

Quality/Preparation of Substrate

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm². The substrate must be clean, dry (surface humidity content <4%) and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Local putting can be achieved with **Epoxol[®] Putty** in proportion from 1A:1B to 2A:1B or **Epoxol[®] Primer SF** mixed with quartz sand.

Instructions for use

Construction Surfaces:

Apply one coat of **Epoxol[®] Primer**. Afterwards, apply one coat of **Neopox[®] Special** diluted 8% with solvent **Neotex 1021**. Before applying, mix both components (A&B) thoroughly to the correct predetermined mixing proportion by weight. **Neopox[®] Special** must be thoroughly mixed using a low speed electric stirrer and it is important to stir the mixture thoroughly near the sides and bottom of the container. Apply the second coat diluted 4-8 % with solvent **Neotex 1021** (if a third coat is required, dilute 4%). **Neopox[®] Special** can be applied with brush, roller or airless spray.

Slip-resistant final surface Neopox[®] Special:

First, **Neopox[®] Special** is applied in the same way as described previously. On the still fresh layer, quartz sand M-32 is spread, 150-300 gr/m², depending on the required anti-slipping effect. After hardening, any loose grains should be removed using a high suction vacuum cleaner. Finally, a finishing sealing layer of **Neopox[®] Special** is applied with roller and without the addition of quartz sand M-32.

Metallic Surfaces:

The surfaces should be free of rust or any corrosion that may prevent bonding and it should be prepared by brushing, grinding or sand blasting. Afterwards apply one coat of **Neopox[®] Special Primer 1225** diluted with solvent **Neotex 1021** to protect against rust. Before applying the primer, mix both components (A&B) thoroughly and apply within 3 hours by brush, roller or airless spray. Then apply two coats of **Neopox[®] Special** diluted 4-8 % with solvent **Neotex 1021**.

Polyester & wood surfaces:

The surface should be rough (not smooth) leveled (e.g. with **Epoxol[®] Putty**), free from dust, dirt, greasy and oily substances. Apply one coat of **Neopox[®] Special** diluted 8% with solvent **Neotex 1021**. Apply the second coat diluted 4-8 % with solvent **Neotex 1021** (if a third coat is required, dilute 4%).

Notes

- Low temperatures and high humidity during application prolong drying time, etc
- The surface should be dry during paint application and protected from rising moisture attack (e.g. Osmotic pressure resistant system) | **Neopox[®] Primer AY**
- Allow at least 4 weeks to pass between casting new concrete structures and painting them with the product.
- Direct and continuous exposure to UV radiation can cause over time the

Neopox® Special

chalking phenomenon.

- Surfaces that have already been painted with epoxy paints should be scrubbed lightly before overcoating with the product to ensure good adhesion between the two paint layers.
- Overcoating a freshly painted surface must take place within 2 days otherwise it is suggested to scrub lightly the freshly painted layer to avoid possible adhesion problems.
- After stirring the entire mixture, apply immediately the material to avoid, in high temperatures, the polymerization of the product into the container.
- The substrate temperature must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish.

Variations

Neopox® Special Winter:

Special version of the product for application in highly humid environments and low temperatures.

(<12°C and >5°C, relative atmospheric humidity <80%, surface humidity content <4%)

Cleaning of Tools

Use solvent **Neotex 1021** immediately after application.

Colors

Available in a variety of colors and special colors on demand over a certain amount.

Packing

Sets of 1kg, 5kg & 10kg in tin cans (components A&B have fixed weight proportion)

Storage Stability

3 years (5-45°C) in sealed tin cans.

Safety Precautions

See Safety Data Sheets.

Auxiliary Materials

Epoxol® Primer: Set 5kg, 10kg

Epoxol® Primer SF: Set 10kg

Neopox® Primer AY: Set 5kg

Epoxol® Putty: Set 1kg, 6kg, 20kg

Solvent Neotex 1021: Tin cans 1kg, 5kg, 20kg

Chemical Resistance

	1 Hour (+20°C)	5 Hours (+20°C)	24 Hours (+20°C)
Phosphoric Acid 10%	C	C	C
Sulphuric acid (10%)	C	C	C
Hydrochloric Acid (10%)	A	B	B
Lactic Acid (10%)	B	C	D

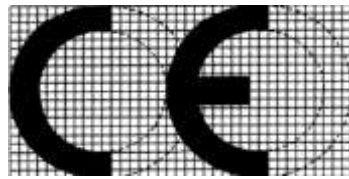
Neopox® Special

Nitric Acid (10%)	B	C	D
Sodium hydroxide - caustic soda (10%)	A	B	B
Formaldehyde (10%)	A	B	B
Ammonia (10%)	A	B	B
Chlorine (5%)	A	B	B
Diesel	A	A	A
Gasoline	A	A	A
Xylene	A	A	A
M.E.K	A	B	B
Alcohol 95°	A	A	A
Saltwater 15%	A	A	A
Engine oil	A	A	A
Red wine	A	A	A
Sea water	A	A	A

- (A) EXCELLENT RESISTANCE
(B) GOOD RESISTANCE (LIGHT DISCOLORATION)
(C) POOR RESISTANCE (INTENSE DISCOLORATION)
(D) NO RESISTANCE

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Neopox[®] Special



1922

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16

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DoP No. Neopox Special / 4950-17

EN 1504-2

Neopox Special

Surface protection system for concrete
Coating

Water vapour permeability	:	Class II
Capillary absorption and permeability to water	:	$W < 0,1 \text{ kg/m}^2 \text{ h}^{0,5}$
Adhesion strength	:	$\geq 1,5 \text{ N/mm}^2$
Permeability to CO ₂	:	$s_D > 50 \text{ m}$
Reaction to fire	:	Euroclass F
Dangerous substances	:	comply with 5.3