

Epoxol® Floor Elastic

Solvent-free, two-component epoxy coating with elasticity



Description

Innovative solvent-free, two-component elastic epoxy coating of high resistance to thermal shocks. Certified for use in the food industry

Fields of application

Floors with demand of elasticity and high mechanical-chemical resistance, e.g. in:

- Production areas, laboratories, warehouses
- Food & beverage facilities, especially in refrigerating rooms subjected to thermal shocks

The surfaces require appropriate preparation and priming prior to the application of Epoxol® Floor Elastic.

Properties - Advantages

- Combines elasticity with high mechanical and chemical resistance
- Ideal solution for floors subjected to very low temperatures or to thermal shocks
- Excellent resistance to abrasion and impact
- Broad service temperature range
- Tested and evaluated for its suitability in contact with foodstuff by the General Chemical State Laboratory of Greece



Packing

Set (A+B) of 18kg

Colours

WHITE	RAL 1015
RAL 7035	RAL 3009

Certificates – Test reports

- Suitable for use in contact with foodstuff, acc. to the Ref. No. 01750/015/000 report issued by the General Chemical State Laboratory of Greece
- Complies with the V.O.C. content requirements acc. to the E.U. Directive 2004/42/CE



Technical characteristics

Mixing ratio A:B (by weight)	100:80
Density (EN ISO 2811-1)	1,20kg/L (±0,05)
Solids content by weight	~100%
Solids content by volume	~100%
Abrasion resistance (Taber Test, CS 10/1000/1000, ASTM D4060)	28mg
Adhesion strength (EN 13892-8)	≥2,5N/mm ²
Hardness Shore D (ASTM D2240)	25
Resistance to temperatures (dry loading)	-50°C min. / +80°C max.
Consumption: 500-650gr/m² per layer (depending on the substrate)	

Application conditions

Substrate moisture content	<4%
Relative air humidity (RH)	<70%
Application temperature (ambient - substrate)	+12°C min. / +35°C max.

Curing details

Pot life (RH 50%)	+12°C	1,5 hour
	+25°C	1 hour
Dry to recoat - Walkability (RH 50%)	+12°C	48 hours
	+25°C	
Full hardening	~ 7 days	
* Low temperatures and high humidity during application and/or curing prolong the above times, while high temperatures reduce them		

Appropriate primers on concrete substrate

	Primer	Description - Details
Solvent-free	Epoxol® Primer SF	Two-component, solvent-free epoxy primer for flooring applications
	Epoxol® Primer SF-P	Two-component, solvent-free epoxy primer, ideal in cases of substrates with increased porosity
	Neopox® Primer WS	Two-component, solvent-free epoxy primer for wet surfaces (without ponding water or rising moisture)
	Neopox® Primer AY	Two-component, solvent-free anti-osmotic epoxy primer, for floors with rising moisture
Water-based	Acqua Primer	Two-component water-based epoxy primer
Solvent-based	Epoxol® Primer	Two-component solvent-based epoxy primer

Instructions for use

Substrate preparation

The concrete must be min. Grade C20/25, with a tensile strength of $\geq 1,5\text{MPa}$, and allowed to cure for at least 28 days, taking all the necessary maintenance measures during its curing period. The cementitious substrate must be properly prepared mechanically (e.g. grinding, shot blasting, milling etc.) to smooth out the irregularities, achieve an open-textured surface and ensure optimum adhesion.

The surface must be dry and protected from rising moisture, stable, clean and free of dust, grease, oil, etc. Loose friable material must be fully removed by brushing or sanding with a suitable machine and a high suction vacuum cleaner.

The surface must be as smooth and flat as possible, as well as continuous (ie without voids, cracks etc.)

Repairs to the substrate, filling of joints, blowholes/voids and surface leveling must be carried out using appropriate repairing products, such as the pourable epoxy-cement mortar **Epoxol® CM** and the epoxy putty **Epoxol® Putty**, or/and a mixture of **Epoxol® Primer SF-P** and Quartz Sand M-32 (indicative mixing ratio 1:1-2 w/w), after proper priming.

Priming

For the stabilization of the substrate and sealing of pores, as well as for creating the optimum conditions for stronger adhesion and higher coverage of the subsequent epoxy system, it is recommended to apply the solvent-free epoxy **Epoxol® Primer SF-P** or an alternative appropriate **NEOTEX®** primer (see table), depending on the substrate. In cases of substrates with increased porosity, an additional priming layer may be required.

Application

Once the primer is dry to overcoat, **Epoxol® Floor Elastic** is applied an an increased thickness per layer by smooth trowel or squeegee, with a layer consumption of $\sim 0,50\text{-}0,65\text{kg/m}^2$.

It is advisable to periodically check the wet film thickness, in order to ensure a uniform application thickness of the application, while the thorough use of a special spiked roller is also recommended.

Prior to mixing, mechanical stirring of component A for 1 minute is recommended. This is followed by the addition of component B into component A in the predetermined ratio (100A : 80B w/w) and stirring of the two components for app. 3-5 minutes with a low speed stirrer. It is important to stir thoroughly both near the sides and at the bottom of the container, so that the hardener (component B) is evenly distributed.

Special notes

- **Epoxol® Floor Elastic** 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. Increased humidity may have a negative impact on the adhesion, the film properties and/or the final result (e.g. blurry surface, stickiness)
- 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

- Due to the nature of the material, the direct and constant exposure of the final coating to UV radiation may cause the phenomenon of chalking over time. For this reason, it is not recommended for exposed applications outdoors.
- In case that an extended period of time (>48 hours) has passed between successive layers, it is recommended to lightly sand the surface of the previous layer, in order to avoid possible adhesion problems of the next layer
- After the application of the system, it is recommended that the floor's expansion joints are sealed with the elastomeric polyurethane sealant **Neotex® PU Joint** or with the epoxy repairing material **Epoxol® Putty** in its elastic version (mixing ratio 1A : 2-2,5B w/w)

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.

Appearance (cured)	Glossy
Colours	Light grey RAL 7035, Terracotta RAL 3009, White, Light beige RAL 1015 Available in other shades upon special arrangement
Packing	Set (A+B) of 18kg in plastic containers
Cleaning of tools – Stains removal	By Neotex® 1021 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: 500g/l (Limit 1.1.2010) - V.O.C. content of the ready-to-use product <500g/l
UFI code	<i>Component A:</i> HQJ0-H0F6-0003-3DTD <i>Component B:</i> NW10-D0F4-N001-DKKH
Versions	Epoxol® Floor , for highly durable self-levelling epoxy floors. Certified for use in the food industry



Epoxol® Floor S, for highly durable self-levelling epoxy floors, where there is no food-grade requirement

Epoxol® Floor Winter, for applications in environments with high humidity (up to 80%) and low temperatures (up to +5°C)

Storage stability

2 years, stored in its original sealed packing, protected from frost, humidity and exposure to sunlight

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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