

Technical data sheet

TM EP 150_en - Version 1.1
Revision: 17.11.2023



Maleki-EP 150

Two component epoxy coating

Item-No.: 1809

Chemical resistant epoxy coating. Can be used both as a primer and as a sealer.

Technical data

Basis	Epoxy dispersion	Color	Stone grey*
Processing temperature	min. +8 °C max. +35 °C	Pot life at 20°C and 60% r.H.	60 – 80 min
Solvents	None	Consumption Ready-to-use mixture Covering quartz sand	Per coating 0.30 kg/m ² 0.65 kg/m ²
Maximum permitted humidity	max. 80 % r.H.	Necessary number of applications	At least 2 coatings
Loadability Walkable Light load Fully loadable	Film formation at 20°C After 12 hours 1 day 7 days	Density ready-to-use mixture without water	1.5 kg/dm ³

* Equivalent to RAL 7030 (approximate indication).

Properties

- two-component
- solvent-free
- water vapor permeable
- water-dilutable
- abrasion resistant
- chemical resistant

areas

- as protective coating for highly stressed surfaces such as workshops, warehouses and production areas
- as primer for critical substrates

Product systems

- Maleki-CP OS 8 (car park coating)

Chemical resistance**

Test medium	Resistance				
	6h	24h	3d	7d	28d
Diesel	•	•	•	•	•
Acetic acid 5 %	•	•	•	•	•
Acetic acid 10 %	•				
Ethanol / IPA 1:1	•	•	•	•	•
Engine oil	•	•	•	•	•
Sodium hydroxide 20 %	•	•	•	•	•
Hydrochloric acid 10 %	•	•	•		
Hydrochloric acid 30 %	•	•	•		
Sulfuric acid 20%	•	•	•	•	•
Scydrol	•	•	•	•	•
Test fuel	•	•	•	•	•
Xylol	•	•	•	•	•

** Chemical resistance following DIN EN 13529.

The chemical resistance of the surface depends on the concentration, temperature, and exposure time of the respective substance. Any contamination must be removed immediately.

Even with confirmed resistance, changes such as loss of gloss or discolouration may occur on the respective surface. However, this does not affect the functionality of the coating.

Substrates

- Concrete
- Cement and calcium sulfate-based screed, heated and non-heated
- Self-leveling compounds, floor filling compounds
- Asphalt screed
- Stone wood- or magnesia screed
- Wood substrates
- Dry screed
- Ceramic coverings

Preparation of substrate

Prior to application ensure that the underground is dry, dust-free, clean, and free from other substances that could lead to separation before coating. Chalking and strongly sandy components must be removed before application (suck off with efficient industrial vacuum cleaner). If necessary, carry out mechanical surface treatment (grinding, milling, blasting) to remove loose components.

Range of usage

- for indoor and outdoor use
- absorbent and non-absorbent substrates in wall and floor

Application

General

After opening the combined container, allow component B to flow completely into component A. Empty the container completely. Then mix both components at a low speed of approx. 300 rpm. This can be done with a drilling machine or a suitable cordless drill driver. For optimum mixing, the Collomix LX 90 S stirrer for standard drill chucks is recommended. For larger quantities, the version LX 120 S is recommended.

To avoid mixing problems transfer the material to a new container after the first step and mix once again. When used on absorbent substrates, up to 10 % clean tap water can be added to the mixed material. The material must then be mixed again briefly. Depending on the application, the ready-to-use mixture can be applied with a brush, roller or rubber blade. For an even surface, a short fiber paint roller suitable for epoxy resins should be used.

The exact drying times depend on the substrate conditions, the ambient temperature and on the relative humidity. Before application of additional layers observe sufficient filming formation of the product.

During the first 24 hours, sufficient ventilation must be ensured. To maintain a uniform surface, avoid entry of dust and dirt particles. The coating must be protected from frost and rain. Do not cover the finished surface with foils or other materials.

Priming

For the use of Maleki-EP 150 as a primer, the first layer is applied as a diluted (10 % water) pre-coat. After drying, apply an undiluted coat. Then the fresh coating is sprinkled in excess with coarse quartz sand (0.1 – 1.25 mm).

After a minimum drying time of approx. 12 hours, the excess material can be swept off or vacuumed. The surface must be completely dry before applying a subsequent coating.

Protective coating

For the use of Maleki-EP 150 as a protective coating on mineral substrates, the application is analogous to the use as a primer.

To improve the slip resistance, the fresh coating can be sprinkled in excess with coarse quartz sand (see primer) after the application of the second coat. For maintaining a uniform color and for better binding of the sand grains, a third coat (diluted 10% water) can be applied after 12 hours at the earliest. To do this, in turn, remove the excess sand. The application quantity must be selected so that the sand layer is sufficiently covered. When using the specified grading curve, Maleki-EP 150 must be applied with at least 0.65 kg/m². If smaller quantities of sand or a different grading curve are used, the application quantity for the third coat must be reduced or adjusted accordingly.

Tools and cleaning

Brush, short fiber paint roller, rubber blade.

All equipment should be washed clean and dried before and after application.

Maintenance and care

Conserving all properties and the respective gloss level of Maleki-EP 150 careful maintenance and care is necessary. Sand or coarse particles are grinding materials and have to be removed during the normal cleaning procedures. Despite the

protective function of the product long lasting loads with harmful liquids should be avoided to prevent staining of the coating. Durable and strong mechanical stress on the substrate (for example heavy machinery) can damage the coating. In this case, we recommend a post-treatment of the damaged area with Maleki-EP 150. For this a basic cleaning is performed with a commercially available, slightly alkaline floor cleaner.

In case of larger areas or for a high degree of staining or pollution the use of mechanical cleaning procedures is recommended. For this a single disk grinder with a white or beige pad is necessary. After cleaning, the surface is rinsed with water until all residues of the cleaner are removed.

The surface should be dry for the subsequent coating. For post-treatment, Maleki-EP 150 is applied in the same way as described (s. section Application). Depending on the degree of staining or pollution a second layer of Maleki-EP 150 may be required.

Packaging and shelf-life

6 kg combined container (Comp. A : 5 kg; Comp. B: 1 kg).

24 kg container (Comp. A : 20 kg; Comp. B: 4 kg).

Original packing is storable for 12 months in dry and controlled temperate areas (not below 0 °C, recommended 10 – 25 °C).

Safety notes

Maleki-EP 150 is a corrosive liquid due to the components it contains. Protect from contact with skin and eyes.. Please refer to the Material Safety Data Sheet which can be requested on www.malekigmbh.com for further information on safety during transportation, storage, handling and disposal. Follow instructions on the packaging.

Relevant regulations and fact sheets

When applying Maleki-EP 150 the following regulations and fact sheets must generally be observed:

General

BG Bau (Employers' liability insurance association of the german construction industry)

Practical guide for handling epoxy resins.

DGUV (German accident insurance) rule 113-012

Activities with epoxy resins

Maleki data sheets

System Installation Manual – Maleki-CP OS 8

Note

Processing beyond the specified processing time leads to reduced film strength and visual impairment.

When used as a protective coating, loss of gloss, chalking and slight colour changes must be expected when exposed to UV radiation.

Maleki-EP 150 is delivered in the standard colour stone grey. Product colors are not fully conformed to the RAL-Map and therefore they should only be seen as estimated classifications. Depending on the batch used, the colouring may vary slightly. Other colours are available on request and with increased lead time. The respective conditions must be agreed with the customer service.

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The content of this technical data sheet corresponds to the latest development and our applications experience. All information is based on ideal conditions and therefore does not apply for every application purpose. Due to different materials, substrates and different actual site conditions no warranty is given for the customer's application. In particular, we assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for the case of intent or gross negligence. In that case the customer has to prove that he has transmitted all required information completely and in a timely manner for a proper and promising evaluation by Maleki GmbH. Any further details regarding the application of our products have to be confirmed in writing by Maleki GmbH. The customer must test the product's suitability for the intended application and purpose. We reserve the right to change the product specifications due to the ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product. The technical data sheet can be requested on www.malekigmbh.com.