

## L'UNICFLOOR ML40 Multilayer Solvent-Free Epoxy Coating

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#### Product Description

L'UNICFLOOR ML40 is a multi-layer floor coating consisting of a solvent-free epoxy-based primer, two different granule thicknesses of silica sand, and a self-leveling coating based on solvent-free epoxy resin with a hardener of cycloaliphatic polyamine. It is used in all floor applications where a seamless, glossy, and flat surface is desired, providing hygiene, antistatic, chemical, and mechanical resistance.

#### Applications

- Hospitals
- Wet areas
- Food, heavy industry, hangars, logistics, and storage facilities
- Military facilities with heavy traffic floors
- Kitchen and associated areas
- Cold storage rooms
- Textile factory floors

#### Product Features and Benefits

- Extremely easy to apply.
- Provides a highly homogeneous glossy surface.
- Resistant to various acidic and alkaline chemicals.
- Easily repairable.
- Antistatic coating with hygienic, antibacterial properties
- Creates dust-free environments.
- Certified for Clean Rooms.

#### System Components

UNEPOX 128-05 SF	2K Solvent-Free Epoxy Primer
Silica Sand (0.3-0.7 mm)	Filler
UNEPOX SL 2K	Solventfree Epoxy Selfleveling/Sealer coat
Silica Sand (0.1-0.3 mm)	Filler
Silica Sand (0.3-0.7 mm)	Filler
Optional Component	
PU ACRYLIC TOPCOAT 2K	UV-resistant Aliphatic Polyurethane Final Coat (Glossy or Semi-matte)

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### Consumptions

PRODUCT	PACKAGING	CONSUMPTION	COLOUR
UNEPOX 128-05 SF 2K Primer	16 kg A + 4 kg B	0,500 kg/m <sup>2</sup>	Yellowish Amber
Silica sand 0,3-0,7 mm	25 kg	1,000 kg/m <sup>2</sup>	-
UNEPOX SL 2K Undercoat/Sealer	15,4 kg A + 4,6 kg B	0,500-0,600 kg/m <sup>2</sup>	RAL
Silica sand 0,1-0,3 mm	25 kg	0,300 kg/m <sup>2</sup>	-
Silica sand 0,3-0,7 mm	25 kg	1,000 kg/m <sup>2</sup>	-
UNEPOX SL 2K Undercoat/Sealer	15,4 kg A + 4,6 kg B	0,500-0,600 kg/m <sup>2</sup>	RAL
Silica sand 0,1-0,3 mm	25 kg	1,000 kg/m <sup>2</sup>	-
UNEPOX SL 2K as Topcoat	15,4 kg A + 4,6 kg B	1,800-2,000 kg/m <sup>2</sup>	RAL
PLK TOPCOAT 2K Optional	15,4 kg A + 4,6 kg B	0,150 kg/m <sup>2</sup>	RAL

\*Total Thickness ~4 mm

### Surface Preparation:

The concrete surface must be dry, clean, and have a strength of 25N/mm<sup>2</sup>. The surface should be free from all dust, oil, and cement residues, and the surface to be coated should be dry at 75% relative humidity according to BS8204.

### Application

#### Priming

UNEPOX 128-05 SF 2K solvent-free epoxy-based filled primer is applied to the concrete surface at a consumption rate of 3-4 m<sup>2</sup>/kg using a roller or rubber squeegee. Consumption may vary depending on the absorbency of the surface.

0.3-0.8 mm silica sand is spread on the wet surface, and after 12-16 hours, non-adhering excess silica sand is removed from the surface by vacuuming or sweeping.

If a second coat is required, it is applied using the same application method 6-8 hours after the first coat has dried.

#### Intermediate Coat

UNEPOX SL 2K intermediate coat/sealer is prepared by first mixing Component A with a high-speed mechanical mixer (300-400 rpm), then adding Component B, and after approximately 3 minutes of mixing, slowly adding A+B:C in a 2:1 ratio (0.1-0.3 silica sand), while continuing to mix until ready for application. The most important point to note here is to mix the two components until a homogeneous mixture is achieved. Unmixed components can create areas that do not dry on the floor, leading to application errors. The product is applied using an SBR squeegee.

This time, 0.3-0.7 mm silica sand is spread on the wet surface, and after 12-16 hours, non-adhering excess silica sand is removed from the surface by vacuuming or sweeping.

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### Second Intermediate Coat Application

UNEPOX SL 2K is prepared by first mixing Component A with a high-speed mechanical mixer (300-400 rpm), then adding Component B, and after mixing for approximately 3 more minutes, slowly adding A+B:C in a 2:1 ratio (0.1-0.3 silica sand), while continuing to mix until ready for application. Once a homogeneous mixture is ensured, the application is started. The crucial point here is to mix the three components until they form a homogeneous mixture. Unmixed components can create areas that do not dry on the floor, leading to application errors. The product is applied using an SBR squeegee.

### Topcoat Application

UNEPOX SL 2K is prepared by first mixing Component A with a high-speed mechanical mixer (300-400 rpm), then adding Component B. After mixing for approximately 3 more minutes, slowly add a mixture of A+B:C in a 2:1 ratio (0.1-0.3 silica sand), continue mixing slowly until it is ready for application. Once a homogeneous mixture is ensured, proceed with the application. The crucial point here is to mix the three components until they form a homogeneous mixture. Unmixed components can create areas on the floor that do not dry, leading to application errors. The product is applied to the floor using a V-notched steel trowel at a consumption rate of 2.8-3 kg per m<sup>2</sup>. Possible air bubble formation is prevented using a spiked roller.

The drying time (at 25°C and 50% relative humidity) is 16-24 hours. This time may vary depending on the temperature and humidity levels.

### Cleaning

All tools should be cleaned with UP 002 Thinner, and hands should be washed only with mild soap and plenty of water.

### Maintenance

Our UNİCA SFC Industrial Surface Cleaner is specially formulated to clean the applied system without damaging the floor. For detailed information about the product, please contact UNİCA's technical/sales department.

### Repair

In areas where repair is necessary, damaged sections should be removed, and repairs should be carried out following the steps described above.

### Limitations

- The L'UNICFLOOR ML40 Epoxy Conductive Coating system should be applied by experienced application teams.
- The application temperature range should be between 15°C-32°C.
- Drying and curing time will be slower at low temperatures and faster at high temperatures.
- The maximum relative humidity during application is approximately 85%.
- The surface temperature should be above the dew point of <3°C.
- The moisture content in the concrete floor should be <6% by weight.

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- The presence of moisture on the floor during application may result in the risk of bubble formation on the surface.
- New concrete should cure for a minimum of 21-28 days.
- Before application, the surface should be cleaned of all dust, dirt, oil, and cement residues.
- If there is a risk of rain within 10-16 hours, you can continue the application. If the surface has been affected by rain, wait for the surface to dry completely before application.
- Depressions, cracks, holes, and damaged areas on the surface must be repaired and improved before application. Nevertheless, surface irregularities may appear more noticeable over the applied system due to the uneven surface structure of the concrete. This is not considered a product or application error.
- If there is a previous coating on the floor, a test application should be conducted at a suitable location on the floor to assess adhesion and other compatibility risks before starting the application.
- Products can deteriorate if exposed to open air and sunlight in their packaging. Therefore, they must be stored in their original sealed packaging in closed and cool storage areas.
- Mix the products with low-speed electric mixers. To eliminate the risk of inadequate mixing, transfer the mixed product to another empty container and remix if necessary.
- Do not add any solvent other than the one recommended by UNİCA.
- The consumption rates specified in this Application document are determined under ideal floor conditions. Please consult UNİCA's Technical Department for applications of different thicknesses.
- L'UNICFLOOR ML40 is not UV resistant; hence, it is recommended for indoor use.
- Stains may occur from prolonged exposure of the floor to chemicals such as hydraulic oil, petrol, diesel, antifreeze, immediate cleaning of the floor from these chemicals should be carried out upon contact.

### Health and Safety Information

Refer to the material safety data sheets of the relevant products for safe usage and disposal of products.

### NOTE

The explanations made on this technical page are based on test evaluations and results of the product according to relevant standards and are intended to provide guidance to applicators. Since labor, weather conditions, construction, equipment used, and other variables affecting the results are entirely beyond our control, UNICA does not provide any explicit or implied warranties regarding this material. UNICA only guarantees that the material complies with the product specifications, and its sole responsibility to the buyer or user of this product is limited to the replacement value of the product in case of manufacturing defects. In no event shall UNICA be liable for any direct or incidental, special, or consequential injury, loss, or damage arising directly or indirectly from the material or work performed. UNICA is not responsible for any defects, alterations, or changes in the substrate on which the products are applied.