UNEPOX SL 2K
Epoxy Selflevelling Floor Coating

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DESCRIPTION
UNEPOX SL 2K is a two-component, glossy, flowable solvent-free epoxy-based floor coating material containing polyamine hardener. Formulated with a combination of 100% solvent-free epoxy and polyamine hardener. As a Cleanrooms certified material, UNEPOX SL 2K provides the most ideal hygiene, antibacterial, physical and chemical resistance.

APPLICATION AREAS
It is used as a floor coating suitable for light to medium human and vehicle traffic in industrial facilities where floor dust affects production, such as activity centers, Aircraft hangars, Airports, Baggage services, Animal shelters, Beverage processing, Packaging/Storage, Bottling, Cafeterias, Chemical processing, Clean rooms, Coolers, Prisons, Corridors, Deck ramps, Dairies, Food processing, Food preparation and service areas, Garages, Laboratories, Laundries, Locker rooms, Shopping malls, Manufacturing, Mechanical equipment rooms, Pharmaceutical factories, Cellulose and Paper processing facilities, Showers, Piping, Warehouses, Wastewater treatment plants, acid tanks, and environments where acidic and alkaline substances come into contact.

PRODUCT FEATURES
When cured, UNEPOX SL 2K creates a dense, pore-free surface resistant to chemicals and abrasion. UNEPOX SL 2K is a trouble-free, low maintenance system that exhibits high abrasion and durability for light to medium traffic areas. UNEPOX SL 2K can be top-coated for increased abrasion resistance, high gloss.

COLOR SELECTION
UNEPOX SL 2K can be produced in many RAL colors. Special colors are available depending on laboratory approvals, minimum production quantities, delivery times for production, and increased cost. Please contact BOYTEM TECHNICAL SERVICE DEPARTMENT for further information.

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TECHNICAL DATA

BASIC&PHYSICAL DATA (for mixed product at 20 °C)	
Specific Gravity	Approximately 1.37 g/cm³
Solid content by volume	Approximately 99.5%
Touch dry	4-6 hours
Coats interval time	Min. 24 hours, Max. 48 hours
Full curing	7 days
Linear Thermal Expansion	18-30.10E6/˚C
Thermal Conductivity	~0.3 kcal/mh˚C
Electrical Conductivity	~10E12 Ohm
Corrosion Resistance	~6 cm3/50 cm3
Tensile Strength	37 N/mm2
Compression Strength	72 N/mm2

CURING TIME

After 48 hours for final coat application for light traffic.
After 72 hours for final coat application for heavy traffic.

THEORETICAL COVERAGE INFORMATION

Without silica sand for an average dry coating thickness of 2 mm: 1m2 / 2,7 kg
With silica sand for an average dry coating thickness of 2 mm: 1m2 / 3,3 kg

MIXING PROCEDURE

Mixing Ratio: 77A/23B by weight

- Mix each component separately before mixing.
- Add component B (Hardener) to component A and mix for three minutes with an electric mixer.
- Mix only the amount of material that can be used in 30-40 minutes.
- If adding silica sand&quartz 0,1-0,3 mm ratio is 1(mixed Unepox SL 2K):1 Silica sand&Quartz(0,1-0,3mm) can be mixed.

Note: Use a low-speed electric mixer (200-300 rpm) to mix UNEPOX SL 2K.

SURFACE PREPARATION

Surface preparation is the most critical part of the job for performance. All substrates must be properly prepared. The work should be done by trained or experienced contractors or applicators. Please refer to BOYTEM service department for application. Special attention should be paid to the following:

Concrete placement

- Curing and construction techniques of concrete substructure
- Age of concrete
- Contamination of the substrate prior to application
- Current condition of the substrate

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New concrete and cement plaster should cure for at least 21 days. After removing mortar residue from cured surface with light sanding or brushing, the selected primer is applied.
Old concrete and cement plaster surfaces should have loose particles such as old paint, dirt, dust removed by sanding, scraping, or brushing. Oil and grease residues are cleaned with detergent water. If neutralization is required, the surface is wiped with a 3-4% hydrochloric acid or acetic acid solution and rinsed with water. Within four hours after this process, it should be primed with an appropriate primer. Painted surfaces should not be left for the next day. Care should be taken to ensure that the floor is completely dry before applying the selected primer.

Additionally, temperature and humidity conditions of the area where UNEPOX SL 2K system will be applied should be checked. A minimum of 10 °C substrate temperature and an optimum room temperature of 20 °C are required for proper curing of UNEPOX SL 2K system.

PRE-APPLICATION RECOMMENDATIONS
The surface temperature should be above 10 °C during application.
The surface should be free from hydrostatic pressure, moisture permeability, paint, hardening agents, and other foreign substances.
Aliphatic Polyurethane topcoat is recommended for areas exposed to intense sunlight.

APPLICATION PROCEDURE
For maximum adhesion to the prepared surface, BOYTEM recommends using UNEPOX SL 2K system with an appropriate primer. The primer will also help to insulate air in the concrete and prevent gas release and air bubbles in the finished system. For suitable primer selection for application on concrete floors, refer to UNEPOX PRIMER 2K, UNEPOX PRIMER WB 2K, and UNEPOX 128-05 SF PRIMER 2K Product Data Sheets.

Pour the mixed material onto the surface in a strip immediately and spread at a rate of 13-14 m2 per 20 kg(without silica sand) of mixture to achieve a thickness of 1 mm. Apply with a traditional V-notch trowel. Spread the material with a trowel in one direction to obtain a uniform layer of approximately 1 mm thickness.
Use a spiked roller to remove possible air bubbles from the surface. Use spiked shoes for easy spiked roller application on coated surfaces. It is sufficient to perform spiked roller application on the necessary area for a few minutes.
Termination points such as door openings, expansion joints, etc., should be made. If it is not possible to complete the application within working hours, a 5 cm masking tape should be placed in a straight line at the termination point. Carefully spread the material up to and slightly beyond the inner edge of the tape. Wait approximately thirty (30) minutes for the material to dry and remove the tape. Allow the floor to cure overnight or for at least 16 to 24 hours.

PACKAGING
Total of 20 kg (16,4 kg A + 4,6kg B) in original metal tin packaging.

STORAGE
The product is stored in its original closed packaging in closed, cool storage facilities within the temperature range of 10°C to 35°C. The shelf life (guarantee) is 12 months from the date of production in a cool and dry place.

CLEANING
All tools and equipment should be cleaned before the materials gel. Use UP-002 Cleaning thinner.

For further assistance, please contact BOYTEM TECHNICAL DEPT.

SAFETY DATA
- Component A contains epoxy resin, Component B contains alkali amines.
- May cause skin sensitivity or other allergic reactions.
- Adequate ventilation is required, especially when the material is heated or sprayed.
- Precautions should be taken to prevent any contact with eyes or skin.
- Wear protective clothing, goggles, mask, and gloves, and/or use barrier creams.
- Keep containers closed when not in use.
- Thoroughly wash hands and equipment after use.

NOTE
The explanations provided in this technical data sheet are based on test evaluations and results conducted according to relevant standards, intended to guide applicators. As workmanship, weather conditions, construction, equipment used, and other variables that may affect results are entirely beyond our control, UNICA does not provide any explicit or implicit warranty regarding this material. UNICA only guarantees that the material conforms to its product specifications, and its sole responsibility towards the buyer or user of this product is limited to the replacement value of the product in case of manufacturing defects. Under no circumstances shall UNICA be liable for any direct or incidental, special, or consequential injury, loss, or damage arising from the material or its application. UNICA shall not be held responsible in any way for any defects, alterations, or changes in conditions in the substrate where its products are applied.