TECHNICAL DATA SHEET



Ref. No: UTD-2565 Issue Date:01.01.2004 Revision Date:12.03.2024 Page:1/3

UNEPOX SL CWB 3K Water-Based Epoxy Conductive Floor Coating

UNEPOX SL CWB 3K

Water-Based Epoxy Conductive Floor Coating

DESCRIPTION

UNEPOX SL CWB 3K is a three-component, water-based epoxy floor coating material containing polyamine dispersion hardener produced with carbon nanotube technology. It is a matte, specially granulometric quartz-filled flowable epoxy-based floor coating material. UNEPOX SL CWB 3K is formulated with a combination of 100% solvent-free epoxy and polyamine dispersion hardener to provide the most ideal physical and chemical resistance.

APPLICATION AREAS

It is used as a conductive floor coating material in operating rooms, computer rooms, electronic device production lines, television studios, production and storage areas with high electrical charge.

PRODUCT FEATURES

When cured, UNEPOX SL CWB 3K creates a dense, non-porous floor that is resistant to chemicals and dirt. It is a smooth, low-maintenance system that exhibits high wear and durability for medium/heavy traffic areas.

COLOR SELECTION

UNEPOX SL CWB 3K can be produced in specific RAL color chart colors. Special colors are available subject to laboratory approvals, minimum production quantities, delivery lead times, and additional costs. For special color requests, please contact the BOYTEM TECHNICAL SERVICE DEPARTMENT.

TECHNICAL

BASIC DATAS (For mixed material @20 °C	
Mass density	1,75 g/cm ³
Solid Content	By Volume %89
Touch dry after	4-6 h
Interval time	Min.24 h, Max.48 h
Full cure	7 d

PHYSICAL DATAS

Linear Thermal Expansion	20-22.10E6/°C
Electrical Conductivity	~10E5 Ohm
Aşınma Direnci (mg/1000 cycles)	156 mg
Flexural Strength	3,5 N/mm2
Tensile Strength	12,7 N/mm2
Compression Strength	54 N/ mm2













TECHNICAL DATA SHEET



UNEPOX SL CWB 3K Water-Based Epoxy Conductive Floor Coating

Ref. No: UTD-2565 Issue Date:01.01.2004 Revision Date:12.03.2024 Page:2/3

CURE TIME

- For light traffic, after the final coat application: 24 hours.
- For heavy traffic, after the final coat application: 48 hours.

THEORETICAL COATING INFORMATION

For an average dry coating thickness of 2 mm: 1 m2 / 3,5 kg on average.

MIXING PROCEDURE

- Mixing Ratio: By weight 55A (Base Material) / 10B (Hardener) / 35C (Filler)
- Mix each component separately before mixing.
- Add component B (Hardener) to component A and mix for three minutes with an electric mixer.
- Gradually add quartz filler while continuing the mixing process.
- Rest the mixture for 2-3 minutes after mixing, then proceed with the application.
- Mix only the quantity that can be used in 30-40 minutes.

Note: Use a low-speed electric mixer (200-300 rpm) to mix UNEPOX SL CWB 3K.

SURFACE PREPARATION

Surface preparation is crucial for the performance of the application. All infrastructure should be properly prepared by trained or experienced contractors or application personnel. For application inquiries, contact the BOYTEM service department.

Special attention should be paid to the following:

- Concrete placement
- Curing and construction techniques of the concrete substrate
- Age of the concrete
- Previous contamination of the substrate
- Current condition of the substrate

New concrete and cement plaster should cure for a minimum of 21 days. Residual mortar on the cured surface should be removed with light sanding or brushing before applying the chosen primer. Old concrete and cement plaster surfaces should have remnants of old paint, dirt, dust, and loose particles removed by sanding, scraping, or brushing. Oil and grease residue should be cleaned with a detergent solution. If neutralization is required, the surface should be wiped with a 3-4% hydrochloric acid or acetic acid solution and rinsed with water. Ensure the floor is completely dry before applying the selected primer. Additionally, check the temperature and humidity conditions of the area where the UNEPOX SL CWB 3K system will be applied. For proper curing of the UNEPOX SL CWB 3K system, a minimum floor temperature of 10°C and an optimum room temperature of 20°C are required.













TECHNICAL DATA SHEET



Ref. No: UTD-2565 Issue Date:01.01.2004 Revision Date:12.03.2024 Page:3/3

UNEPOX SL CWB 3K Water-Based Epoxy Conductive Floor Coating

PRE-APPLICATION RECOMMENDATIONS

Surface temperature should be above 10°C during application.

The surface should be free from hydrostatic pressure, moisture permeability, paint, hardening agents, and other contaminants.

APPLICATION PROCEDURE

BOYTEM recommends using the UNEPOX SL CWB 3K system with a suitable primer on the prepared surface to ensure maximum adhesion. The primer will also assist in isolating air in the concrete and preventing gas release and air bubbles in the finished system. Refer to the UNEPOX PRIMER CWB 2K Product Data Sheet for proper primer selection.

- Pour the mixed material onto the floor in a strip immediately and spread at a rate of 6-7 m2 per 25 kg of mixture to achieve a 1 mm thickness. Apply with a traditional V-notch trowel.
- Spread the material in one direction with a trowel to achieve a uniform layer of approximately 2 mm thickness.

STORAGE

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

CLEANING

All tools and equipment must be cleaned before the materials gel. Use Tap Water.

SECURITY RELATED DATAS

- Component A contains epoxy resin, Component B contains alkaline amines.
- May cause skin sensitization or other allergic reactions.
- Ventilation is necessary, especially when the material is heated.
- Necessary precautions should be taken to prevent any contact with eyes or skin.
- Wear protective clothing, goggles, gloves and a mask and/or use protective creams.
- Keep containers closed when not in use.
- Wash hands and equipment thoroughly after use.

Note

The explanations made in this technical page are made according to the test evaluations and results of the product according to the relevant standards, and it is aimed to provide a guide to the practitioners. As workmanship, weather conditions, construction, equipment used and other variables that affect results are completely beyond our control, UNICA does not give any express or implied warranty regarding this material. UNICA only warrants that the material complies with the product specifications, and the sole responsibility of the buyer or user of this product is limited to the replacement value of the product against manufacturing defects. In no event shall UNICA be liable for any direct or incidental, special or consequential injury, loss or damage in connection with the material or work performed. UNICA is in no way responsible for any defect, change or condition change in the infrastructure where its products are applied.











