



KOSTER MPE

Technical Data Sheet CT 261

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Multi-purpose epoxy for chip and quartz floors

Features

KOSTER MPE is a unique, versatile, modified cycloaliphatic multi-purpose epoxy. KOSTER MPE is a clear, two component, thermoset, low odor, 100% solids epoxy designed as an all-purpose coating system for a variety of substrates. It is suited for embedding chips and quartz and will accept finish top coats. It is part of the KOSTER Chip and Quartz Floor System.

Technical Data

Property	Test Method	Result
Hardness (Shore D)	ASTM D-2240	75-80
Compressive Strength	ASTM D-695	17,000 psi
Tensile Strength	ASTM D-638	4,000 psi
Tensile Elongation	ASTM D-638	7.5%
Adhesion to Concrete	ASTM D-4541	400 psi, concrete failure
Impact Resistance	ASTM D-2794	>160
Water Absorption	ASTM D-570	0.04%
Flame Spread	ASTM E-648-14	Class I, NFPA 101
Abrasion Resistance	ASTM D-4060	30 mg loss
Coefficient of Friction	ASTM D-2047	0.7 (wet) 0.8 (dry)
Gloss (60 Degrees)	ASTM D-523	100

Property	Data
Percentage solids by weight	100%
Mix Ratio (by volume)	A (resin) : B (hardener) 2 : 1
Viscosity, 70°F	450 cps
Pot Life, 70°F	approx. 40 min
Dry Time, 70°F	approx. 8 hrs
Working Time, 70°F	approx. 20 min
VOCs	0
Recoat Window	48 hr (Koster MPE) 24 hr (All Other Products)

Fields of Application

- Laboratories
- Garages
- Pharmaceutical Plants
- Clean rooms
- Kitchens
- Hospitals
- Kennels

Substrate

Substrates must be sound, solid, profiled to at least an ICRI CSP2, and free of materials or contaminants that may act as bond breakers. The substrate must be primed with KOSTER ES. Refer to the respective data sheet.

Application

Mixing: Mix 2 parts (by volume) of A component (resin) with 1 part (by

volume) of B component (hardener). Use an electrical mixer (400 RPM) and a "Jiffy-type" mixing paddle to mix the material. Mix for 2 minutes. Pour the fully mixed material onto the substrate immediately after mixing.

Over textured floor: Apply material using flat squeegee, then back roll and cross roll.

Over smooth floor: Apply material using a squeegee to desired thickness; follow by back rolling and cross rolling.

For KOSTER Chip or Quartz Floors:

Standard installation procedure is a double broadcast application with a top coat:

1. Apply a coat of mixed KOSTER MPE at approx. 160 sq ft/gal with a flat squeegee. Back roll and cross roll with a 3/8-in epoxy rated non-shed roller. Along edges, the material can be brush applied.
 2. Broadcast chip or quartz into the fresh, wet KOSTER MPE coat. Wearing spiked shoes, walk on the wet epoxy holding a suitable container and broadcast chip or quartz into the fresh coating until the floor appears dry. This will require approx. 0.5 lb/sq ft. Throw the aggregate into the air so that it falls vertically onto the floor. It may take 15 to 30 seconds for the quartz to be absorbed by the epoxy. Do not broadcast into the edge that will be joined into the next section. Leave a 2 ft wide wet edge without broadcast to permit overlapping when proceeding onto next section. Do not walk on the broadcast chip or quartz with spiked shoes. Be sure to keep contaminants out of the chip or quartz. Allow to cure.
 3. Sweep off the excess chip or quartz using a stiff, clean, dry broom with synthetic bristles.
 4. Lightly sand the chip or quartz surface in order to remove high spots. Sweep or vacuum the floor to remove all loose particles.
 5. For second broadcast, mix additional material and repeat steps 1 through 4.
 6. Install a seal coat over the chip or quartz broadcast. Broadcast medium and desired texture will affect the coverage of seal coat(s). More material will be required with a coarser broadcast medium or if a smoother finish is desired. Less material will be required with a finer broadcast medium or if a rougher finish texture is desired.
- For an abrasion-resistant, UV-resistant, textured surface, apply KOSTER UTC. If UV-resistance and high abrasion resistance are not required, KOSTER MPE can be applied as a top coat. An additional MPE top coat can be applied to achieve a smooth surface. KOSTER UTC can be applied to the smooth surface for additional abrasion and UV-resistance. Do not introduce to tire traffic on finished installation unless it has been allowed to cure for 7 days.

If KOSTER MPE is to be installed over a self-leveling underlayment or screed, the substrate must be primed with at least one coat of KOSTER ES to prevent outgassing or other inconsistencies in finished appearance. Inspect the substrate for pinholes before coating with

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The installer is responsible for the correct application taking into consideration the specific conditions of the construction site and the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which deviate from the specifications contained in any Company literature may not be relied upon in the absence of written confirmation from the Company. The installer must comply with all testing, technical requirement, guidelines, and industry customs at all times. The terms, conditions, and limitations contained in the written warranty for the product controls over the specifications contained herein. This guideline has been technically revised; all previous versions are invalid.

KOSTER

Waterproofing Systems

KOSTER MPE.

Coverage

Dependent on application.

Base coat: Approx. 160 sq ft/gal (10 mils)

Seal coat(s): Approx. 80-100 sq ft/gal (16-20 mils)

Cove base: Approx. 40-45 linear feet of 4" cove per mix (2 pints A, 1 pint B, 6-7 qts Q40 quartz aggregate)

Cleaning

Clean tools immediately with xylene (or similar) after use.

Packaging

CT 261 003	3 gal kit
CT 261 007	7.5 gal kit
CT 261 015	15 gal kit
CT 261 165	165 gal kit

Storage

Store between 50°F and 90°F.

Safety

Follow Safety Data Sheet and the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed.

Warranties

KOSTER warrants that its product shall be in accordance with the specifications published in the current revision of the products data sheet. KOSTER covenants that in the event any of its products fail to meet their published specifications, KOSTER shall replace those products proved to be defective. KOSTER shall not be responsible for any incidental or consequential damages due to the breach of its warranties. Notwithstanding the foregoing, KOSTER's sole liability hereunder shall not exceed the cost of the defective product originally purchased. EXCEPT AS SET FORTH ABOVE, KOSTER MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED AND MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The user must determine if the product is suited for the intended use and the user must bear the risks and liabilities associated with it.

Related products

KOSTER MPE-F	Art.-Nr. CT 262
KOSTER MPE-Color	Art.-Nr. CT 263
KOSTER MPE-F-Color	Art.-Nr. CT 264
KOSTER UTC	Art.-Nr. CT 321
KOSTER UTC-Color	Art.-Nr. CT 322
KOSTER ES	Art.-Nr. CT 366
KOSTER Color Chips	Art.-Nr. CT 429
KOSTER Color Quartz	Art.-Nr. CT 486 050

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