



# **KOSTER UC 300**

Technical Data Sheet CT 253 010

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# Thin film urethane cement flooring system

#### **Features**

KOSTER UC 300 is a roller applied, three-component aromatic urethane cement thin film system. It is a heavy duty pigmented coating, typically applied 8 to 16 mils thick. It is designed to withstand chemical attack and thermal shock while providing abrasion resistance. KOSTER UC 300 serves as a primer for KOSTER UC 100, topcoat for KOSTER UC 200, and seal coat for KOSTER UC 100 broadcast system. It can also be used for patching and coving when mixed with suitable aggregate. KOSTER UC 300 can be applied to concrete slabs with relative humidity up to 100% RH.

# **Technical Data**

Property	Data
Mix Ratio (by volume)	Three-component kit
Pot life, 70°F	15 minutes
Dry Time, 70°F	6-8 hours
Working Time, 70 °F	15 minutes
Spread Rate	90 sq ft/kit @ 8 mils
VOCa	^

## **Physical Properties**

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Property	Test Method	Result
Hardness (Shore [	D) ASTM D-2240	80D
Compressive Stree	ngth ASTM C-579	8000psi
Tensile Strength	ASTM D-638	2100psi
Flexural Strength	ASTM D790	5000psi
Adhesion to Concr	ete ASTM D-4541	>400
Impact Resistance	e ASTM D-2794	>160
Water Absorption	ASTM D-570	≤0.04%
Flame Spread	ASTM E-684-14	Class I, NFPA 101
Abrasion Resistan	ce ASTM D-4060	50mg loss
Coefficient of Frict	ion ASTM D-2047	0.7 (wet)
		0.8 (dry)
Gloss (60 Degree)	ASTM D-523	10-15

#### Fields of Application

- Chemical Processing
- · Bottling areas
- Food Processing Areas
- Cooking/Chilling Areas
- Pharmaceutical
- Bakeries

- · Plant vehicle aisles
- · Sanitizing areas
- Cage Wash Areas
- Manufacturing areas
- · Production areas
- Warehouses

# Substrate

Substrates to receive KOSTER UC 300 must be sound, solid, profiled and free of materials or contaminants that may act as bond breakers. On concrete, an ICRI CSP 3-4 is recommended.

# Application

### Mixing:

The material is delivered as a kit. Each kit includes: A component (resin), B component (hardener), and C component (cement and aggregate). Mix one kit at a time. Do not split up kits. Do not mix this product in direct sunlight or when temperatures exceed 90°F. Exposure to high temperatures will greatly reduce the working time. Make sure all necessary tools, mix and measure containers, etc are ready. Do not mix until ready for use.

Transfer the A component into a clean 2 gal mixing vessel. Be sure to get all the material, including any material clinging to the wall of the packaging, into the mixing vessel. Add the B component. Using a high speed mixer (approx. 800 rpm) equipped with a 3.5-in Jiffler mixing paddle, thoroughly mix A and B components for 10-15 seconds. Add the C-component in increments while continually mixing. Thoroughly mix all three components for 60 seconds. Make sure there are no clumps in the mixed materials. Mixing time should not exceed 90 seconds. Mix only what can be applied in 15 minutes. Never attempt to re-temper the mortar after it begins to set.

#### <u>Planning:</u>

Proper planning is essential to ensure a seamless appearance of the finished floor. Cold joints will show in the finished floor. Lay out installation in sections so that the full width of area to be coated can be completed in 20 minutes or less to assure no placement lines.

# KOSTER UC 300 as primer for KOSTER UC 100:

- 1. Mix material as instructed above under "Mixing".
- 2. Pour the mixed material onto the floor in a 4-in ribbon.
- Scrape out all mixed material using a paint stick and do not leave any residue in the mix bucket.
- 4. Use a suitable notched squeegee to spread the material on the substrate to the desired thickness. Spread the material uniformly in one direction.
- 5. Use a 3/8-in non-shed roller to back roll the material. Wet out rollers in a puddle prior to using them. Back roll the material perpendicular to squeegee application.
- 6. Cross roll at 90  $^{\circ}$  to eliminate roller lines. Be sure to overlap 4-in inches between each roll.

Always pour next batches into a wet edge. This will avoid dry edges that can lead to severe cold joints.

# KOSTER UC 300 as seal coat for KOSTER UC 200:

- 1. Mix material as instructed above under "Mixing".
- 2. Pour the entire mixed material onto the KOSTER UC 200 in 4-in ribbons.
- Scrape out all mixed material with paint stick and do not leave any residue in the mixing vessel.
- 4. Use a suitable notched squeegee to spread the material on the substrate to the desired thickness. Spread the material uniformly in one

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 my 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.

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direction.

- 5. Use a 3/8-in non-shed roller to back roll the material. Wet out rollers in puddle prior to using. Back roll the material perpendicular to squeegee application.
- 6. Cross roll at 90  $^{\circ}$  to eliminate roller lines. Be sure to overlap 4-in between each roll.

# KOSTER UC 300 as seal coat / topcoat for sand broadcasted KOSTER UC 100:

- 1. Mix material as instructed above under "Mixing".
- 2. Pour the entire mixed material onto the broadcasted (KOSTER Quartz Q40) KOSTER UC 100 in 4-in ribbons.
- 3. Scrape out all mixed material with paint stick and do not leave any residue in the mix bucket.
- 4. Use a suitable notched squeegee to spread the material on the substrate to the desired thickness. Spread the material uniformly in one direction.
- 5. Use a 3/8-in non-shed roller to back roll the material. Wet out rollers in a puddle prior to using them. Back roll the material perpendicular to squeegee application.
- 6. Cross roll at 90° to eliminate roller lines. Be sure to overlap 4-in between each roll. Brush apply along edges and around drains and equipment.

The final cross roll must be completed immediately to ensure good uniformity of the material and to eliminate any residual roller marks in the finished surface (within 10 minutes of mixing at 70 °F).

Do not roll back into an area once you have left it; too much rolling may leave the surface uneven. Not enough rolling will also leave the surface uneven. Clean the squeegee blade with solvent if curing material builds up on it. Ensure the squeegee is completely dry before bringing it into contact with fresh or curing KOSTER UC system components. Keep moisture from coming into contact with KOSTER UC 300 during installation and curing. Water may alter surface appearance.

Allow to fully cure. Allow a minimum of eight hours cure time before exposing the coating to light foot traffic at 75°F. A minimum of 24 hours cure time is required at 50°F. 72 hour cure time is required before exposing the coating to heavy loads.

# KOSTER UC 300 for coving, patching and filling:

- 1. Depending on the consistency of the mix, wet prime the area to be coved or patched with KOSTER UC 300 if the mix is too dry.
- 2. Mix material as instructed above under "Mixing".
- 3. For coving, add up to 2 gal or 30 lb of KOSTER Quartz Q40 to the KOSTER UC 300 mix to achieve a consistency as desired. For patching or filling, add up to 2 gal or 30 lb of KOSTER Quartz Q25 to the KOSTER UC 300 mix to achieve a consistency as desired. To mix the additional quartz into the ready mixed KOSTER UC 300, use a 5-in spiral type mixing paddle.
- 4. Apply the mixed material using tools suitable to install the material at its consistency.

## Coverage

90 sq ft per kit at 8 mils, 45 sq ft per kit at 16 mils

#### Cleaning

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

# **Packaging**

CT 253 010 6.5 lb combipackage: Component A 2.25 lb; Component B 2 lb;

Component C 2.25 lb.

#### Storage

Store the material dry between 50°F and 90°F. Do not use open or partial bags of aggregate.

#### Safety

Consult Safety Data Sheet. Follow 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 VAP I 2000 Zero VOC
 Art.-Nr. CT 230

 KOSTER VAP I 2000 FS
 Art.-Nr. CT 233

 KOSTER VAP I 2000 UFS
 Art.-Nr. CT 234

 KOSTER UC 100
 Art.-Nr. CT 251 026

 KOSTER UC 200
 Art.-Nr. CT 252 020

 KOSTER Universal Cleaner
 Art.-Nr. X 910 010

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