

KOSTER ES

Multi Purpose Epoxy Sealer

Technical guideline / Article number 6.025
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Description:

KOSTER ES is a versatile epoxy sealer. KOSTER ES is a clear two component low odor, 100% solids epoxy designed as an all-purpose sealer and primer for direct application to concrete.

Uses:

KOSTER ES is used to seal concrete to prevent outgassing when installing KOSTER Chip and Quartz Floor Systems. It can also be used as a standalone dust proof sealer.

Surface Preparation:

Substrates must be sound, solid, profiled and free of materials or contaminants that may act as bond breakers.

Mixing:

Mix 2 parts (by volume) of A component (resin) with 1 part (by volume) of B component (hardener). For a 1.5 gal mix, measure 0.5 gal of B component (hardener) and 1 gal of A component (resin). Pour the B component (hardener) into a clean mixing bucket, making sure no material remains in the measuring bucket. Add the A component into the B component making sure no material remains in the measuring bucket. Use an electrical mixer (800-1000 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.

Application:

KOSTER ES can be applied by roller or squeegee. Apply a coat of mixed KOSTER ES at approx. 300 ft²/gal with a flat squeegee. Then back roll and cross roll with a 3/8" epoxy rated non-shed roller. Along edges, the material can be brush applied. To reduce viscosity, e. g. to penetrate into dense concrete, KOSTER ES can be thinned with Xylene. The maximum amount that can be added is 1 qt per 1.5 gal mix. The Xylene is added while A and B components are mixed together.

Testing for Moisture and/or Contaminants:

It is the owner or the owner's representative's responsibility to examine the substrate for contaminants and moisture. Testing for contaminants is not required but recommended by KOSTER. Limits for moisture vapor transmission for epoxy floor systems are:

- 3 lbs./1,000 sq. ft./24 hour using the calcium chloride test per ASTM F-1869 or
- 75% relative humidity using In-situ Relative Humidity Testing per ASTM F-2170.

Contact the KOSTER American technical team for additional details and guidelines concerning testing.

Technical data:

Property	Data
Percentage solids by weight	100%
Mix Ratio (by volume)	A (resin) : B (hardener) 2 parts : 1 part
Viscosity at 70°F	450 cps
Pot life at 70°F	approx. 40 min
Dry Time at 70°F	approx. 8 h
Working Time at 70°F	approx. 20 min
Volatile Organic Compound (VOC)	Nil

Physical Properties:

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	4000 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/NFPA 101 (3 mils over cement board)	ASTM E-84	Not Tested
Abrasion Resistance CS17 Wheel 1000 GM Load 1000 Cycles	ASTM D-4060	30 mg loss
Coefficient of Friction Wet (James Friction Tester) Dry	ASTM D-2047	0.7 0.8
Gloss (60 Degrees)	ASTM D-523	100
Thermo Cycling		Not Tested

Coverage:

Coverage 3 -10mils (160-535 ft²/gal)

KOSTER ES

Packaging:

The A and B component of KOSTER ES are packaged in 1 gal canisters, 2.5 gal canisters and in 55 gal drums. The mixing ration of 2 parts A to 1 part B by volume leads to the following kits:

3 gal kit → consists out of two 1 gal A (resin) canisters and one 1 gal B (hardener) canister

7.5 gal kit → consists out of two 2.5 gal A (resin) canisters and one 2.5 gal B (hardener) canister

165 gal kit → consists out of two 55 gal A (resin) drums and one 55 gal B (hardener) drum

Shelf Life:

1 year in original sealed container

Storage:

Between 50° F - 90° F

Clean Up:

Immediately with Xylene (or similar) after use

Disposal:

Dispose of in accordance with current local, state and federal regulations. Collect with absorbent material.

Limitations:

This product is best suited for application in temperatures between 60°F and 90°F.

Epoxy inherently yellows and requires a UV stable topcoat.

Safety Precautions:

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. KEEP OUT OF REACH OF CHILDREN.

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.