

## KÖSTER ORS-C

Technical guideline / Article-No.  
Stand: December 1, 2009

6.038

### Epoxy-based oil resistant primer coating

#### Features

KÖSTER ORS-C is an epoxy-based primer coating that is applied as part of the KÖSTER Oil Removal System (ORS).

#### Technical data

Consistency:	Approx. 800 MPa
Mixing ratio:	8.33:1 (A: B); 4:1 by volume
Pot life:	1 h at 21 °C (70°F)
Foot traffic	after 12 h
Compressive strength	80 N / mm <sup>2</sup>
Specific gravity	2 g / cm <sup>3</sup>
VOC Compliant	4.5 g / l
Standard color	Green
Flash point	95 °C (203 °F)
Solid content	97 %
Water vapour reduction	6 lbs / [1000 ft <sup>2</sup> * 24 h]

#### Field of application

Application as part of the KÖSTER ORS System:

The KÖSTER ORS System consists out of two components:

- 1) A cleaning system using the special detergent KÖSTER ORS-D
- 2) The oil resistant primer coating KÖSTER ORS-C with a sand broadcast.

Both products combine to provide a dry, uncontaminated surface which is fit to receive flooring/coating systems. The KÖSTER ORS-D has the ability to penetrate deep into the concrete surface to extract oil and/or hydrocarbon based compounds leaving a clean surface for the ORS-C coating. The detergent is forced into the concrete with a "spinner" that ejects hot water at 350 bar (5000 psi) to force the detergent into the concrete. Depending on the degree of oil contamination, 2 or more KÖSTER ORS-D applications may be necessary depending on levels of contamination. Consult with the KÖSTER ORS tech staff for complete application requirements.

#### Surface Preparation

The substrates to receive the KÖSTER ORS System must be sound and absorptive and meet acceptable industry standards as defined in ACI Committee 201 report "Guide to Durable Concrete." Any type of surface contamination such as adhesives, adhesive residue, old coatings, curing compounds and underlayments must be removed completely by shotblasting prior to the ORS treatment being applied. Do NOT apply KÖSTER ORS onto surfaces that have been treated with any type of concrete sealer prior to

consulting with KÖSTER. Make sure the substrate surface does not deteriorate due to the presence of Alkaline Silica Reactive (ASR) substances or sulphurous compounds encountered in certain geographical areas. Testing for concrete deficiencies and contaminants such as ASR, un-reacted silicates, high water vapor emissions, etc. is the responsibility of the building owner and strongly recommended by KÖSTER to avoid product failures.

KÖSTER advises that surfaces to be treated with KÖSTER ORS be inspected and evaluated by an experienced firm (independent lab) prior to the application of any KÖSTER systems to determine its suitability to receive KÖSTER Systems. Independent lab core testing and analysis is highly recommended prior to the start of any ORS treatment project or application.

Depending on level of contamination, it may be necessary to mechanically remove surface buildup of oily crusts prior to the application of special detergent KÖSTER ORS-D. The substrate must be cleaned with KÖSTER ORS-D and hot water (82 °C (180° F)) blasted with a minimum of 350 bar (5000 psi) in accordance with the detergent scrubbing method as outlined in ICRI Guideline No. 03732. Vacuum the oily wastewater into containment tanks. Repeat process until oil is removed from the concrete slab. Dispose of the oily wastewater in accordance with all federal, state, and local regulations.

If self-leveling underlayments are to be used for any reason, always apply these systems ON TOP OF the KÖSTER ORS System, never underneath. Consult with KÖSTER prior to using underlayments, repair mortars and screeds.

#### Mixing

Mix Component A and B at a ratio of 4:1 by volume. This is accomplished by pre-mixing the A component; then pouring the B component into the short-filled A component; mixing all the while. Mix with a slow speed motor (<400 RPM) and "Jiffy-type" mixer for 3 minutes to a streak-free consistency.

#### Application

Pour the fully mixed material onto the substrate immediately after mixing. Squeegee material evenly over surface, followed by back rolling with a ¾" (1 cm) nap roller suitable for epoxies. Under no circumstances should the floor be allowed to dry prior to the application of the KÖSTER ORS-C. The substrate should be at a surface saturated damp condition with no standing or puddling water.

WAIT A MINIMUM OF 15 - 20 MINUTES and broadcast washed / dried silica type sand into wet KÖSTER ORS-C coating to

