

KÖSTER ORS-D

Technical guideline / Article-No.

6.039

Stand: December 1, 2009

Special detergent for cleaning oil polluted concrete

Features

KÖSTER ORS-D is a special deep penetrating detergent for cleaning oil polluted concrete which is applied as part of the KÖSTER Oil Removal System (ORS).

Technical data

Color	Clear
VOC compliant	0.0 g / l

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 contaminates 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

If scrubbing the detergent into the substrate, mix KÖSTER ORS-D with water in a ratio of 1:10 before application. If applying KÖSTER ORS-D with a foam gun, no prior mixing with water is required since the material is added directly into the water jet.

Application

Apply the ready mixed material to the concrete substrate and scrub it into the substrate or apply it to the substrate using a foam gun.

Environmental Conditions during application:

The KÖSTER ORS System must be applied at ambient and substrate temperatures between 50° and 90° F. (10° C and 32.2° C). The relative humidity must not exceed 80%.

Packaging

9.8 kg canister

Storage

Store the material dry and cool but frost free. In originally sealed packages, it can be stored for approx. 18 months.

**Consumption**

0.2 kg / m² (350 - 400 sq ft/gal) total for a two-coat application

Cleaning of Tools

Clean tools immediately after use with water

Disposal

Contain and dispose of all waste material & waste water generated by the ORS cleaning & coating procedures in accordance with all current local, state, and federal regulations and requirements. Collect any spills with absorbent materials.

Safety Precautions

Wear protective rubber gloves and tightly sealed goggles when processing the material. Avoid prolonged skin contact. Keep the material out of reach of children. It is for industrial use only. Read the material safety data sheet before using it.

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 proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for 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 exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.