X-CALIBUR CONSTRUCTION CHEMISTRY

Technical Data Sheet

X-Tech EpoxySeal SF

Solvent free clear epoxy sealer for concrete floors

LEED® VOC Compliant

301060215

Product Description

X-Tech EpoxySeal SF is a solvent free clear two component epoxy sealer for application to concrete floors to increase abrasion resistance and provide an easy to clean hygienic sealed surface that is resistant to pedestrian traffic and light duty polymer wheeled trolleys.

Advantages

- Increases abrasion
- Easy to clean
- Dust proofs
- Resists common cleaning chemicals
- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Low viscosity
- Solvent free
- Penetrates and stabilizes the surface

Specification Compliance

SCAQMD Rule 1113
LEED NC2009 IEQ 4.2

Laboratory Test Data

Property	Typical Results
Volume solids	100%
Specific gravity	1.05 ± 0.05

Application Properties

	10C	20C	30C
Pot life	180 mins	90 mins	45 mins
Recoat time	24 to 48 hours	16 to 32 hours	8 to 24 hours
Full cure	14 days	7 days	5 days

Volatile Organic Content

VOC = 0 g/L

Theoretical Coverage

10 to 20m² per liter per coat.

Actual coverage will depend on porosity, wastage and surface profile and can be up to 30% or more higher than theoretical coverage.

Packaging

1, 5 and 15 liter packs

Shelf Life

18 months when stored below 30C under shade in a dry environment.

Application Guidelines

Epoxy coating and floor systems should be applied by experienced coating crews. X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Surface Preparation

The substrate must be structurally sound. Loose or unsound concrete should be removed and made good. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. Prepare the surface using a light surface grind to produce a slight texture.

Moisture Testing

The concrete slab should be tested for moisture with the Rapid RH system following the procedure in ASTM F2170. If the humidity reading is greater than 80% then conduct moisture vapor emission rate (MVER) testing using the procedure in ASTM F1869. (Both test kits are available for purchase from X-Calibur). If the MVER is under 5lbs/1000ft^2/24h use X-Tech EpoxySeal SF. If the MVER is 5 to 10lbs/1000ft^2/24h use X-Prime MT100. If the MVER is over 10lbs/1000ft^2/24h use X-Tech EpoxySeal WD.

Substrate Strength

The surface strength of the substrate should be sufficient to restrain any stresses which occur during the setting and hardening of the resin floor.

Substrates that have a pull off strength of 1.5 MPa when tested to BS EN 13892-8 or ASTM D 4542 or a rebound hammer value in excess of 25 when tested to BS EN 12504-4 or ASTM C805. (Test equipment for these tests are available to purchase or rent from X-Calibur).

Mixing
Mix using the following technique. Add the hardener component into the base component and mix using a slow speed drill (500 rpm) with an X-Shield Coating Mixer Paddle for 3 minutes or until both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum. Mix only full packs.

Application
Apply two coats of 100 micron wet film thickness using brush, roller or airless spray. When using airless spray, tip size should be 0.015" to 0.0018" at a pressure of 2200psi. Allow to dry before over coating. Ensure that no ponding occurs and that it is not applied too thick. If the first coat is left longer than the recoat time below then wipe the cured surface with X-Shield RC1. Apply second coat immediately the surface is dry. For application to polished concrete surfaces contact X-Calibur for further information.

Maintenance
The sealed surface can be maintained to extend its surface life and repair any scratches by treating the surface with X-Tech PolishCoat every 6 months. High traffic areas may require frequent application.

Limitations
Will not accommodate movement cracks.
Do not expose to temperatures in excess of 60C.
Do not expose to water or other liquids until fully cured.
Do not use if to be exposed to direct sunlight.
Do not be apply within 3C of the dewpoint or if it is within 5C of the dewpoint and dropping.
Avoid excessive application.
Avoid skin contact.
Do not discard into the water system.

Health and Safety
This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.us

Authorized Technical Specialist
Please note that only X-Calibur Authorized Technical Specialists ('ATSs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.us for a full list of X-Calibur ATSs.

Datasheet Validity
X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.x-calibur.us to ensure you have the latest version.

Warranties
X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of the products as it does not have control of the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Chemistry Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** X-Calibur Construction Chemistry Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.