



X-Tech Formula X

Advanced silicate based high performance hardener, sealer and densifier for concrete

Product Description

X-Tech Formula X is a modified advanced silicate solution when applied to concrete penetrates and reacts with the cement to create a silicate structure complex in concrete pores, cracks and capillaries, that produces a sealed surface that is highly abrasion resistant and waterproof. It is suitable for all concrete surfaces including warehouses, production units, car parks etc.

Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Greatly improved abrasion resistance and life expectancy
- Reduction in ingress of chloride ions in marine environments
- Protect against efflorescence
- Produces a dust free waterproof surface
- Single coat application
- Increased impact resistance
- Reduced chemical attack from hydrocarbons and other chemicals
- Easy to apply
- Long term performance
- Can be polished to produce high strength
- Can be used with color stains to produce abrasion resistance colored surface
- Can be used over shake-on flooring hardeners
- Treated surface can receive coatings
- 10 years warranty

Typical Uses

- Surface hardening of new and old concrete
- Dusting proofing of concrete
- Case hardener for pre-cast products
- Marine structures including pontoons, sea walls and decks
- Waterproofing of concrete surfaces
- Increasing abrasion and impact resistance
- Polished concrete

Specification Compliance

SCAQMD Rule 1113
LEED NC2009 IEQ 4.2

Typical Properties

Water absorption	Up to 90% reduction
Abrasion resistance	Up to 400% improvement
Impact resistance	Up to 25% improvement
Light reflectance	Up to 30% improvement
Chloride diffusion	Up to 90% improvement

Volatile Organic Content

VOC = 0 g/L

Theoretical Coverage

5m² to 10m² per liter (200ft² to 400ft² per gallon).
Note: The coverage figures shown are typical values for product applied to a smooth finish actual coverage will be affected by surface texture and porosity. When used only as a dustproof use at 10m² per liter.

Packaging

20 & 200 liter drums

Shelf Life

24 months when stored in cool dry conditions in original unopened drums.

Installation Guidelines

Surface Preparation

Surfaces must be sound and free from loose materials, laitance or coatings. Cracks or holes can be repaired and allowed to cure fully prior to treatment.

Oil and grease contaminated surfaces should be degreased using X-Treat Substrate Cleaner followed by washing with clean water.

The concrete must be dry prior to treatment.

Application

Freshly placed concrete must be at least 14 days old prior to treatment. Concrete containing pigments should be 28 days old prior to treatment and a small area tested first to determine the effect on the color.

Apply to any non-movement cracks ensuring they are filled with the product, then apply to the remaining area using a soft broom or brush scrubbing it in to the concrete surface. Large areas can be treated using mechanical scrubbing machines.

Allow the product to be absorbed for up to 2 hours, any product not absorbed after this period must be removed.

Very porous or dusty surfaces may require a second application. Localized areas may require a second application.

If a second application is required allow the concrete to dry for 24 hours and apply as per the original procedure, again making sure any non absorbed product is removed after 2 hours.

Limitations

Carbonated concrete will require a pretreatment to ensure free calcium is available in the concrete.
Will not accommodate dynamic movement cracks.
Protect aluminum and glass from overspray.
Do not dispose off into the water system.
Excess material not absorbed must be removed to prevent the formation of a soft film on the surface.

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 Safety Data Sheet (SDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.co.ke

Authorized Technical Specialist

Please note that only X-Calibur Authorized Technical Specialists ('ATs') 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 ATs.

Datasheet Validity

X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.x-calibur.co.ke 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 over the installation or end use of the product. 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.