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X-Shield AntiCarb S

Water dispersed aliphatic acrylic carbonation resistant decorative coating

Product Description

X-Shield AntiCarb S is a high performance anti-carbonation coating that is decorative and can provide exceptional resistance to chloride ingress when used in conjunction with an X-Shield Anti-Chloride treatment.

Composition

X-Shield AntiCarb S is a water-dispersed, solvent free, polymer modified, aliphatic acrylic resin coating containing fillers, pigments, adhesion promoters and wetting agents.

Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- High carbonation resistance
- UV resistant
- Styrene free
- Breathable
- Non-flammable
- Environmentally friendly
- Available in wide range of colors
- Can be used with anti-chloride treatments
- Contains anti-fungal and anti-bacterial additives

Uses

- Anti-carbonation coating
- Decorative coating
- Anti-chloride coating

Specification Compliance

SCAQMD Rule 1113

LEED NC2009 IEQ 4.2

Classified under BS EN 1062-1:2002 as a Grade C₁ anti-carbonation coating for concrete.

Volatile Organic Content

VOC = <10g/L

Fire Performance

- UK Building Regulations (Document B): Class O
- BS 476 Part 7: Class 1 Surface Spread of Flame

Laboratory Test Data

Property	Typical Results
Water vapor transmission rate	>100g/m ² .d
Liquid water permeability	<0.1kg/m ² .h ^{0.5}
Carbon dioxide permeability	>300m ^{air}
Equivalent Concrete Cover (30 MPa)	790mm
Reduction in water absorption	>99%
Rapid chloride permeability	Very low
Chloride ingress after 1000 hrs. salt spray testing	Nil
Elongation	>200%

Color

Standard: Grey (BS 10A03) and white.
Other colors available on request subject to minimum order.

Finish

Matt and satin finish available.

Theoretical Coverage

Exterior applications: 5.7m² per liter per coat.
Interior applications: 8m² per liter per coat.

Packaging

19 liter drums.

Shelf Life

18 months when stored below 35C under shade in a dry environment.

Installation Guidelines

X-Shield AntiCarb S should be applied by experienced paint 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. The surface should be prepared by light grit blasting or high pressure water blasting to produce a lightly exposed aggregate surface. Any bug holes should be filled with a cementitious or acrylic filler.

Priming

Priming is not normally required. If the substrate appears weak or friable it will be necessary to stabilize the surface with X-Shield Primer AR. This product should also be used on cement render, plaster substrates and concrete with a high alkali or cement content. In areas subject to high chloride concentrations, prime using an X-Shield Anti-Chloride treatment.

Application

Apply in two coats of 175 microns wet film thickness for exterior applications or 125 microns wet film thickness for interior applications, using brush, roller or airless spray. When using airless spray, tip size should be 0.017" to 0.0020" at a pressure of 2200psi. Recoat after 6 to 8 hours at 30C. Clean equipment using water.

Limitations

Do not use in immersed conditions.
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 allow to freeze in storage.
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 ('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.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 over 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.