

# X-Shield TarEpoxy 100

## High performance solvent free coal tar epoxy coating for concrete and steel

### Product Description

X-Shield TarEpoxy 100 is a high performance, high build, coal tar epoxy protective coating suitable for use in a wide range of applications, including aggressive environments.

### Composition

X-Shield TarEpoxy 100 is a solvent free epoxy resin containing coal tar (pitch), acid resistant fillers and wetting agents.

### Advantages

- High abrasion resistance
- Primerless
- Resistant to wide range of chemicals
- Waterproof
- Can be used in immersed conditions

### Uses

- Marine structures
- Bridge piers
- Pile caps
- Sheet piles
- Basements
- Storage tanks
- Steel and galvanized pipes

### Laboratory Test Data

Property	Typical Results
<b>Finish</b>	Semi gloss
<b>Dry film thickness</b>	300 to 500 microns (2 coats)
<b>Volume solids</b>	100%
<b>Specific gravity</b>	1.5 ± 0.05
<b>Pot life</b>	60 minutes at 30C
<b>Touch dry</b>	6 hours at 30C
<b>Recoat time</b>	6 to 24 hours at 30C
<b>Full cure</b>	3 to 5 days at 30C

Note: X-Shield TarEpoxy 100 can be subjected to sea water after 3 hours provided that the material is conditioned to 40C prior to application and is applied in direct sunlight. Depending on ambient temperature, it may

be necessary to speed up the cure using hot air blowers after application.

### Volatile Organic Content

VOC = 50g/L

### Color

Black.

### Theoretical Coverage

4.5m<sup>2</sup> per Kg per coat.

Actual coverage will depend on wastage and surface profile and can be up to 20% higher than theoretical coverage.

### Packaging

5 Kg and 20 Kg packs.

### Shelf Life

18 months when stored below 35C (95F) under shade in a dry environment.

### Installation Guidelines

X-Shield TarEpoxy 100 should be applied by experienced coating crews. NCC 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 Concrete

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 X-Shield BugFill.

### Steel

Any damaged steel should be removed and replaced. The substrate should then be grit blasted to minimum SA 2½. Depending on the level of corrosion protection required, an anti-corrosion or holding primer may be necessary. X-Shield TarEpoxy 100 must be applied

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immediately after the grit blasting has been completed. Any imperfections should be filled with X-Shield BugFill.

### **Mixing**

Add the hardener 'Part B' into the base 'Part A' and mix using a slow speed drill (500rpm) with an NCC X-Calibur approved mixing 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 in two coats of 150 micron wet film thickness using brush, roller or airless spray. When using airless spray, tip size should be 0.020" to 0.0025" at a pressure of 2200psi. Recoat after 8 to 24 hours at 30°C. Clean equipment using X-Shield Solvent S.

### **Limitations**

May change color in when exposed to direct sunlight.  
Will not accommodate movement cracks.  
Do not be apply within 3C of the dewpoint or if it is within 5C of the dewpoint and dropping.  
Do not apply below 5C.  
Avoid excessive application.  
Avoid skin contact.  
Do not discard into the water system.  
Apply only on to slabs that have a waterproofing system installed in order to prevent blistering due to osmosis.

### **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.ncc.com.eg](http://www.ncc.com.eg).**

### **Authorized Technical Specialist**

Please note that only NCC 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.ncc.com.eg](http://www.ncc.com.eg) for a full list of NCC X-Calibur ATs.

### **Datasheet Validity**

NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet up-date section on [www.ncc.com.eg](http://www.ncc.com.eg) to ensure you have the latest version.

### **Warranties**

NCC 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. NCC 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 NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemicals **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.** NCC X-Calibur Construction Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay