NCC X-CALIBUR CONSTRUCTION CHEMISTRY

Technical Data Sheet

X-Shield EpoxyLock 65

High performance anti-corrosive epoxy coating for steel

Product Description
X-Shield EpoxyLock 65 is a high performance epoxy coating that that combines ease of application with a wide range of chemical resistance.

Composition
X-Shield EpoxyLock 65 is a solvented epoxy resin containing fillers, pigments, adhesion promoters and wetting agents.

Advantages
- High abrasion resistance
- Resistant to wide range of chemicals
- Resistant to sour gas
- High temperature resistance
- Waterproof
- Long pot life

Typical Uses
- Gas pipelines
- Steel surfaces
- Steel piles
- Steel shutters

Laboratory Test Data

Property	Typical Results
Finish	Glossy
Dry film thickness	80 to 125 microns per coat
Volume solids	64 ± 2%
Heat resistance	Up to 90C (wet) Up to 120C (dry)
Specific gravity	1.35 ± 0.05
VOC Content	353 g/L

Application Properties

Pot life	8h at 23C
Recoat time	12 to 24h at 30C
Full cure	7 days at 30C

Compliance
X-Shield EpoxyLock 65 complies with all major international specifications for gas pipeline coatings including British Gas CM1/CM2 and API SRL2.

Color
Standard: Grey.
Other colors are available on request.

Theoretical Coverage
X-Shield EpoxyLock 65: 5 to 8m² per liter
X-Shield Primer ZRE: 4 to 6m² per Kg
X-Shield AC Primer: 10m² per liter
X-Shield SF Primer: 10m² per liter
Actual coverage will depend on wastage and surface profile and can be up to 20% or more higher than theoretical coverage.

Packaging
X-Shield EpoxyLock 65: 5 Kg pack.
X-Shield AC Primer: 1 and 5 liter packs
X-Shield SF Primer: 1 and 5 Liter packs

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

Application Guidelines
X-Shield EpoxyLock 65 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
Surfaces should be thoroughly cleaned and degreased to SSPC-SP1 prior to blasting. All sharp edges, protuberances, welds, etc should be ground down to remove any sharp edges. The degreased surface should now be grit blasted to a minimum SA 2½ in accordance with BS7079 Part A1 or equivalent. This means very thorough blast cleaning using chilled steel grit to provide near white metal 85% clean. The surface shall be free from all foreign matter. A surface profile of 45 microns is the recommended finish. All dust and abrasive residue must be removed from the surface prior to application of the first coat. Depending on the level of corrosion protection required, an anti-corrosion or holding primer may be necessary.

Mixing
Mix X-Shield EpoxyLock 65 using the following technique. Add the hardener 'Part B' into the base 'Part A' 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.

Priming
Priming is not normally necessary, however dependent on the service conditions and the condition of the substrate, steel surfaces may be primed using X-Shield AC Primer or X-Shield SF Primer.

Apply a single coat of 100 to 165 microns wet film thickness using brush, roller or airless spray.
Allow to dry before over coating. Ensure that no ponding of the primer occurs and that it is not applied too thick. Recoat after 4 to 12 hours at 30C. If the primer is left to dry for more than 12 hours the surface will have to be re-primed. Clean equipment using X-Shield Solvent.

Application
Apply in two coats of up to 200 microns wet film thickness using brush, roller or airless spray.
When using airless spray, tip size should be 0.055" to 0.071" at a pressure of 2000psi.

Limitations
Will change color when exposed to direct sunlight.
Will not accommodate movement cracks.
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 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

Authorized Technical Specialist
Please note that only NCC 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.ncc.com.eg for a full list of NCC X-Calibur ATSs.

Datasheet Validity
NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on 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.