

# Auramix BCI

## Organic Bipolar concrete penetrating corrosion inhibiting admixture.

### Uses:

Auramix BCI is used as corrosion inhibiting admixture for all reinforced concrete and not limited to

- Below ground structure such as Pile, pile cap, mat foundation where chloride threshold value is more in the soil.
- Bridges and flyovers
- Structures in coastal areas and submerged conditions
- Power plants
- Steel plants
- High rise buildings
- Structures in sea water
- Pre-cast Elements
- Tunnels and underground structures

### Standards compliance

Auramix BCI complies to various standards such as ASTM G1, JIS 1535(modified), IS 9103 for compressive strength, AASHTO - T259, ASTM G3 for steel bars embedded in concrete, ASTM G109\*, ASTM G180 and ASTM C1582M.

### Advantages

Auramix BCI is a low dosage admixture having

- Nitrites free
- Improves durability of the structure
- Used as a admixture: Dosage is independent of anticipated chloride levels
- Ensures steel protection even in the hardened concrete
- Does not get consumed by cement hydration
- No adverse effect on slump retention and compressive strength
- Independent reports tested to International standards

### Description.

Auramix BCI is an unique bipolar concrete penetrating type corrosion inhibiting admixture for steel in the reinforced concrete. It is a blend of selected amines through research which preferentially provide protection to steel in both liquid and vapour phases. The vapours penetrate even through the hardened concrete towards steel due to strong affinity.

### Action Mechanism :

Auramix BCI absorbs onto the reinforcing steel and forms a uniform protective film covering both cathodic and anodic active sites on the steel surface. This protective film prevents access of chlorides, moisture and oxygen to the steel and thereby significantly slows down the rate of corrosion.

### Technical support

Fosroc provides technical advisory service for on-site assistance and guidance on concrete mix design, optimum dosage evaluation trials.

### Physical Properties

|                  |                             |
|------------------|-----------------------------|
| Appearance       | : Colourless to pale yellow |
| pH               | : 10.0 ± 1.0*               |
| Relative Density | : 1.04 ± 0.02*              |

\* The uniformity parameters like specific gravity, pH, chloride content etc. will vary for specific customer requirements and mix design. Please refer our MTC issued for specific product configuration for measuring our product parameters that will be constantly and consistently administered.

### Dosage

Recommended dosage for Auramix BCI shall be 2kg / cubic meter of concrete, irrespective of cementitious content in the mix design.

### Compatibility

Auramix BCI is compatible with PCE and SNF based admixtures, in addition to all types of cement, OPC, PPC, OPC & GGBFS and OPC & Flyash, micro silica.

Auramix BCI is also compatible with air entraining, waterproofing, shrinkage reducing concrete admixtures.

### Estimating

### Packaging

Auramix BCI is available in 240 Kg barrels.

### Storage

Auramix BCI has a shelf life of 12 months if stored above 5°C and below 50°C in the tightly sealed original container.

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## Precautions

### Health and safety instructions

Auramix BCI should not be swallowed or allowed to come in contact with skin or eyes. Suitable protective gloves and goggles should be worn.

Splash on skin should be cleaned with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately do not induce vomiting. Please refer safety datasheet before use.

### Fire

Auramix BCI is water based and non- flammable.

### Cleaning and disposal

Spillage of Auramix BCI should be absorbed on to sand, earth or vermiculite and transferred to suitable container. Remnants should be hosed down with large quantity of water. The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.

## Additional information

The Fosroc range of associated products includes high strength cementitious, epoxy grout, polyester resin based mortar for rapid pre-setting of steel shims to level or for direct bedding of small base plates; Resin Anchoring systems for same day anchoring of bolts in drilled holes in concrete or rock. Also available a range of products for use in construction; viz., curing compounds, release agents, flooring systems, repair mortars, sealants and waterproofing materials.

Separate datasheets are available on these products.



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### Important note :

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.

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