

Product Data Sheet  
Edition 07.2014  
Identification No. CA - 31



## PCI 2005

Water Based, Concrete Admixture Modified With Migrating Corrosion Inhibitor

### Description

**PCI - 2005** is liquid concrete admixture which contains migrating corrosion inhibitors ,it provides excellent protection to reinforcing bars and other metals embedded in concrete from corrosion induced by carbonation ,chlorides and other destructive materials of the environment .

#### Standards :

NSF Standard 61 approved for potable water applications .

### Where to use

- **PCI 2005** is used as corrosion inhibitors admixture for the following :
- All reinforced ,precast , pre-stressed ,post-tensioned or marine concrete structure.
- Steel reinforced concrete structures .
- Steel reinforced concrete bridges , highwayes and streets .
- Parking decks , pillers ,pipes and utility poles.
- Restoration and repair of all reinforced concrete commercial and civil engineered structures .
- Shotcrete application .
- In corrosive environments (carbonation, deicing salts and atmospheric attack)
- Beams and foundations.

### Advantage

**PCI 2005** provides the following advantage

- Doesn't contains calcium nitrite.
- Does not affect the air entrainment or strength of the concrete mix .
- Non – hazardous ,non toxic .
- Safe and environmentally friendly .
- Protects both anodic & cathodic areas.
- Migrates towards metals .
- Required dosage doesn't depend on chloride concentration

- Laboratory and field proven world wide .
- Cost effective .
- Biodegradable .
- Protects against the harmful effects of corrosion even in the densest concrete.

### Properties

Appearance	Dark brown liquid
PH	11 - 12
Density	1.19 ± 0.01 Kg / L
Non volatile content	25 - 30 %

### How to use

**PCI 2005** It can be added to concrete at the ready-mix plant, directly to the ready-mix truck drum, to portable mixers, or directly into repair mortars. Mix concrete and mortars thoroughly.

#### Curing:

**PROKEM** recommends the concrete be cured for 24 hours after finishing operations are complete by using **KEMCURE** curing compound. spray applied surface contact curing membranes should be used in all cases.

#### Job site Mixing:

Add the **PCI 2005** to the concrete truck and let drum to rotate for 7 minutes before discharge

#### Compatibility:

Other admixtures may be used in the same concrete batch with **PCI 2005** provided that such admixtures are added separately and the combination has no deleterious effect on the concrete.

**LIMITATION:**

**PCI 2005** can retard the setting time up to 4 hours compared to a control. Standard, commercial, non - chloride accelerators can be used to adjust the set time if needed

**Dispensing :**

The correct quantity of admixture should be measured by means of a recommended dispenser. The admixture should then be added to the concrete with the mixing water to obtain the best results.

**Theoretical Dosage rate:**

Add **PCI 2005** to concrete mix or repair mortars and grouts 0.9-1.75 L/m<sup>3</sup> ( long term 26 years).

**Cleaning:**

Spillage of PCI 2005 can be removed with water.

**Packaging:**

Available in 1kg, 25 kg. pails or 220 kg. drums.

**Shelf life & Storage:**

Up to one year when stored in original unopened packaging out of direct sunlight and kept under cover protected from extremes temperature.

**Health and Safety**

- **PCI 2005** is non-toxic.
- Use gloves to avoid contact with skin.
- If skin comes in contact, wash immediately with soap and water.
- Do not use solvents.
- Eye contamination must be immediately washed with water, then seek medical treatment.

**Additional Information**

**PROKEM** provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure.

**PROKEM** designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction,

**PROKEM** extends technical services to include after sales support to assist users in a proper handling of our products.

**PROKEM** representative must be present at the job site during placement of the first batch of treated concrete. Do not proceed without this representative being present for certification.

**Environmental Considerations**

**PCI 2005** Admixture is environmentally safe and contains no volatile organic compounds (VOCs).

**PCI 2005** Admixture contains an anti-microbial biocide to inhibit mold and bacteria growth