



Arina Polymer

شرکت آرینا پلیمر

تولید کننده انواع اپوکسی های ساختمانی

## **Arina-tight CWP 491**

**Capillaries water proofing, crystal formation material for concrete**

### **Introduction:**

**Arina-tight CWP 491** is a method of waterproofing to provide total and permanent solution to water leakage or seepage in concrete structures or any cementitious substrate. Formation and development of insoluble crystals into capillaries, effectively blocks the further passage of water and ensures permanent water tightness for the life of the structure.

### **Where to use:**

**Arina-tight CWP 491** is supplied in powder form and can be mixed with water to a slurry or mortar consistency, depending on method of application. It can also be used for negative water proofing where there be no access to reverse side of substrate. The product is suitable to be used in following water proofing applications:

- Foundation and basements.
- Water tanks and reservoirs.
- Dams and tunnels.
- Bath rooms and services.
- Industrial kitchens.
- Swimming pools.
- Cement based pipes.
- Water channels and galleries.
- Bridge, deck and jetties.

### **Technical information:**

Appearance	Gray powder
Toxicity	Non-toxic, can be used with potable water
Specific gravity	1.350 kg./l
Chloride content	Nil

### **Advantages:**

- Stable against both positive and negative water pressure.
- Excellent adhesion and penetration.
- Easy to mix and apply.
- Provides non-porous surface.
- Protect concrete and reinforcement against corrosive waterborne substances.
- Non-toxic, suitable to be used with potable water.
- Low odor and user friendly.
- Strong enough to be used as final coating.
- Becomes an integral part of substrate.

### **Surface preparation:**

The substrate must be sound and free from loose particles. Remove dust, laitance, oil, grease, curing compounds, waxes, disintegrated and other bond inhibiting materials from the surface. Surface can be prepared by blasting methods, chipping or water jetting to insure that all capillaries and micro cracks are open. Substrate must be full deep saturated but free from standing water before application.

### **Mixing:**

**Arina-tight CWP 491** is supplied in powder form and requires mixing at job site, slowly add water to **Arina-tight CWP 491** (Do not add powder to water) and mix, using a low speed drill fitted with a suitable paddle. Mix that quantity to be used within 20 minutes. In order to prepare slurry, add one part of water



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to 2.25 to 2.5 part of powder by volume, for paste preparation less water is required to achieve desired consistency. Do not add any additional water after initial mixing.

**Application method:**

*Arina-tight CWP 491* can be applied in slurry form by means of a short, stiff bristle brush or roller. Minimum two coats at right angle are necessary to insure full coverage of substrate. The second coat can be applied whilst the first coat is firm, but still 'green', usually 3-4 hours after first coat (dependant on temperature).

Trowel application can be undertaken when paste form is desirable such as heavy depression or honeycomb filling. If application layer thickness exceeds 10 mm, apply in layers, the second layer after the previous one has dried.

**Material consumption:**

Two coat slurry application: 1kg per m<sup>2</sup> per coat.

Application of render coat: 10kg per m<sup>2</sup> at 4.5 mm thickness.

**Curing:**

Curing is essential part of application to insure full growth of crystals, *Arina-tight CWP 491* must be prevented from drying out and should be kept damp for 5-7 days. Spraying water and covering with polythene sheets is effective when drying out would otherwise take place. Curing compounds are unsuitable. Protect from weathering, sunlight, frost and wind blow for a similar period of time.

Tanks and other water retaining structures may be filled 24 hours after final application as crystal growth is accelerated by water pressure.

**Cleaning:**

All tools and equipment should be washed with water after completion of each job or before break time. Cured material can only be removed mechanically.

**Storage / Shelf life:**

Store out of direct sunlight on pallets, and protect from moisture and rain fall. The shelf life for originally unopened package is 12 months from date of production.

**Packaging:**

*Arina-tight CWP 491* is available in 25 Kg. Bags.

**Safety precautions:**

*Arina-tight CWP 491* is not a dangerous product, but while working with any chemical material use personal safety devices such as gloves and goggles. If contacted with eyes or mucous membrane, wash immediately with plenty of water and seek medical attention.