# CEMEK-Pro2K903



## Product Technical Data Sheet

A Two Component Polyurethane System for Multipurpose Application

### **Description**

**CEMEK-Pro2K903** is a specifically formulated, two component Polyurethane system to be used for various applications. The resultant coating has good di-electric strength, good impact strength and good chemical & corrosion resistance, fast rate of attainment of ultimate strength and high barrier property to prevent seepage.

## **Properties**

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- Excellent Water Proofing
- Excellent resistance to chemical and corrosion
- Good sea water resistant.
- ❖ Good di-electric strength
- High Vibration dampening
- Aesthetic look
- High Strength to weight ratio
- \* Fast rate of attainment of ultimate properties
- Good bonding strength especially expansion joints.

## Uses

**Construction Industry:** - Building facades, Floor slabs, Anti-Skid PU floor coating, building deck overlays, Glazed tiles, grouting of foundations bolts, water proofing of terrace awnings, flooring, repair of private roads and fountains, lining of tanks, etc.

**Transport Industry: -**Under deck coating to prevent corrosion and withstand dynamic abrasion, in vehicles.

Marine Industry: - Shiplap cladding, water proofing of stern, hull & deck, for both wooden and FRP Boats. Cladding on metallic parts exposed to sea water.

**Casting Industry:** - To obtain prototype casting for further development, templates that could be machined to obtain models. Railways: Flooring of Railway coaches and interior lining of rolling stock.

**Aeronautical:** - Laying of joint-free runways, impact and abrasion resistant sealing of runway slabs.

Electrical: -Laying insulating floors, mats, insulation of busbars etc.

**Defense:** -Interior & exterior coating of high-altitude cabins.

**Bridges:** - Sealing of span gaps, cladding on metallic and bailey bridges.

Water Resource Management: - Interior lining of canals to prevent seepage.

## **Specifications & Properties**

| Pot life (Minutes)<br>(Measured at 25°C for a mass<br>of 100 gms)               | 15-20 Minutes           |
|---|-------------------------|
| Density   | 1.30±0.01               |
| Flash Point ( <sup>0</sup> C)   | 100°C                   |
| Mixing Ratio  | Resin:Hardener (100:40) |
| Colour  | As Required             |
| Curing Time at 25°C   | 10 Hours                |
| Ultimate Curing at 25°C   | 165 Hours               |
| Tensile Strength (N/mm <sup>2</sup> )   | 8-10                    |
| Compressive Strength (Kg/cm²)   | 80-100                  |
| Hardness Shore D<br>(Measured after sample post<br>cured at 85° C for 60 min's) | 70                      |
| Adhesion with Concrete (N/mm <sup>2</sup> , min)                                | 1.5 -1.8                |
| Water Absorption (%)  | 0.2 Max                 |
| Weight Loss (110° C, 3 hrs., % max.)  | 0.5                     |

#### **Chemical Resistance**

HCI (5%) 7 days : Pass H<sub>2</sub>SO<sub>4</sub> (5%) 7 days : Pass HNO<sub>3</sub> (5%) 7 days : Pass NaOH (5%) 7 days : Pass

Benzene : Pass as per IS: 101 Kerosene : Pass as per IS: 101 Diesel : Pass as per IS: 101

## **Method of Application**

- Examine resin and hardener containers, to be sure that they are properly sealed.
- Obtain a homogenous resin by stirring it thoroughly with a stirring rod each time before

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- use. There should not be any lumps of resin inside the resin container.
- Mix the required quantity of resin and hardener in prescribed ratio.
- Use the mix immediately, while ensuring that no air is entrapped during application.

## Storage & Shelf life

CEMEK-Pro2K903 is best kept at ambient conditions in cool & well-ventilated place. The product is stable for at least twelve months when properly stored.

## **Handling Precautions**

During handling maximum precautions should be taken. keep the container tightly sealed, when not in use. wear mask while spraying and keep the material away from ignition sources. avoid eye and skin contact. safety goggles & protective gloves should be worn during handling. if it comes in contact with the body, wash the affected area with plenty of clean water.

## Cleaning

All tools should be cleaned immediately after application using CEMEK Solvent. Hardened materials must be cleaned mechanically.

#### **Information**

Although the basic formulation of our products generally remains unchanged production refinements arising from continuing research and evaluation program may occasionally result in marginal changes in properties.

#### Warranty

Our products are manufactured under stringent National / International quality norms and guaranteed against any manufacturing defect. Recommendation as per this data sheet are based on our team's combined practical experience and exposure over several years in the field of construction and are believed to be most appropriate. However, no liability can be accepted by us, as the conditions of use of such products are beyond our control.

### FIRST AID!

Eyes and skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists.

- Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse. Inhalation: Remove subject to fresh air. Swallowing: Dilute by giving water to drink and contact a physician promptly.
- Never give anything to drink to an unconscious person.

**Note:** - Keep out of reach of children for professional and industrial use only.

## **Another Products Range of CEMEK**

- ❖ Alkali Free Accelerator for wet Shotcrete in Liquid form
- Alkali Free Accelerator for Dry Shotcrete in powder form.
- Modified Sodium Silicate based accelerator for Shotcrete
- Integral Water Proofing Compound.
- Crystalline Water Proofing Compound.
- Heat Resistance Coatings/Paints with application
- Cement, Micro Fine Cement, Epoxy, PU and Colloidal Silica based grouts with application.
- Wax Based, Resin Based and Resin Based Aluminized Concrete Curing Compound.
- Ready to use High Strength, Rapid Set, Non-Shrink, Self-Levelling, Crack Repair, Heavy Duty Machine Installation product.

## **Services**

- Water Proofing (Epoxy, PU, Acrylic, SBR etc.)
- Dry & Wet Shotcrete
- Crack Repairing
- PU, Epoxy, Polyester Grouting (Tunneling & Mining & Structures)

## **House, Industrial & Institutional Cleaners**

- Steeliness Steel Cleaner
- Degrease & Oil Removers
- Paint & Coating Striping Agents
- Concrete Removing Agents
- Glass Cleaners
- Tar Removing form car body
- Rust Removing Agent
- Rust Converter

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