

# **PRISM JOHNSON LIMITED**

(Formerly Prism Cement Limited)

**H&R Johnson India Division**

Industrial Product and Natural Resources

Technical Datasheet

Construction Chemicals

## **ENDURACON IWC 04 – Integral waterproofing admixture for concrete and mortar**

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### **DESCRIPTION**

**ENDURACON IWC 04** is a liquid admixture based on lignosulphonates which mixes readily with water and therefore disperses evenly. **ENDURACON IWC 04** is a liquid admixture for concrete to achieve high resistance to water ingress. It conforms IS 2645 – 2003.

### **WORKING PRINCIPLES**

It waterproofs by improving the quality of the concrete or mortar. It reduces the water demand for required workability and minimizes segregation and bleeding. Thus it is more efficient compared to traditional powder water proofers as its use results in two fold improvement of concrete or mortar

### **PRODUCT APPLICATION**

- ✓ Should be used in all structural concrete that is constantly or intermittently in contact with water.
- ✓ Precast & Pre-stressed concrete.
- ✓ Slope Roof Slabs, Flat Roof Slabs.
- ✓ Beams, Columns & Slabs.
- ✓ Repair and renovation.

### **ADVANTAGES**

- ✓ Provides resistance to water penetration either under hydrostatic pressure or capillary absorption.
- ✓ Minimises porosity and honey combing. Produces dense homogenous concrete.
- ✓ Improved adhesion to reinforcing and stressing steel
- ✓ Better resistance to carbonation and other aggressive atmospheric conditions
- ✓ Lower permeability - increased durability
- ✓ Reduced shrinkage and creep

## PROPERTIES

|                           |                     |
|---------------------------|---------------------|
| Appearance                | : Dark Brown Liquid |
| pH                        | : $\geq 6.0$        |
| Specific Gravity at 25 °C | : 1.125 $\pm$ 0.02  |
| Chloride content          | : Nil to 0.2% Max   |

## RECOMMENDED DOSAGE

Typically 0.2 to 0.4% by weight of cement / cementitious is recommended. However optimum dosage of **ENDURACON IWC 04** should be determined with trial mixes. If maximum dosage is used a minimum of 15% water should be reduced to ensure no loss in strength. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local H&R JOHNSON representative for additional information on **ENDURACON IWC 04** admixture or on its use in developing concrete mixes with special effects of over dosage.

A severe over-dosage of **ENDURACON IWC 04** can result in the following:

- ❖ Extension of initial and final set
- ❖ Bleed / segregation of mix
- ❖ Increased plastic shrinkage
- ❖ Increase in air entrainment

### Points to be remembered when producing waterproof concrete:

- ✓ Ensure water / cement ratio is within the range of 0.40 to 0.60.
- ✓ Keep water content as low as possible.
- ✓ Place concrete quickly and compact it well.

## CAUTION

**ENDURACON IWC 04** should be dispensed through suitable calibrated dosing equipment. It should not be premixed with other chemicals if not recommended. It should be mixed thoroughly before use.

## SAFETY PRECAUTION

**ENDURACON IWC 04** does not fall into the hazard classifications of current regulations. However it 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. For further information on safe handling, storage and disposal, you are advised to follow MSDS.

## PACKAGING & DELIVERY

Delivered in 50 kg drum & 235 kg drum

## STORAGE

Keep in cool and dry place under shade and away from direct sunlight

## SHELF LIFE

12 months from the manufacturing in original unopened condition.

**FURTHER INFORMATION**

**PRISM JOHNSON LIMITED**

**H & R JOHNSON (INDIA) Division**

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