

PRISM JOHNSON LIMITED

RMC India Division

Construction Chemicals Business

Technical Datasheet

Construction Chemicals

ENDURACON HGHS – Concrete Admixture

DESCRIPTION

ENDURACON HGHS is a liquid specialized admixture based polycarboxylate polymers technologies with long lateral chain. **ENDURACON HGHS** is designed as a high range water reducer or superplasticiser. It is developed for the UHP concretes (M100 and above grade) that require low water-cement ratios or high water reductions with excellent workability retention properties. It conforms IS 9103 – 2004 and ASTM – C494 Type G (High Range Water Reducing and Retarding Admixture).

WORKING PRINCIPLES

It increases the workability of concrete mixes by its powerful deflocculating and dispersing effect on the cement particles, which in turn helps to produce high workable concrete or enables in significant reduction in free water content.

PRODUCT APPLICATION

- ✓ Ultra high performance concrete (UHPC) for durability
- ✓ High early and ultimate strength concrete (M100 and above)
- ✓ High workability without segregation or bleeding
- ✓ Precast & Pre-stressed concrete
- ✓ High rise / pumped concrete
- ✓ Concrete containing pozzolans such as micro silica, GGBFS, PFA.

ADVANTAGES

- ✓ Elimination of vibration and reduced labour cost in placing
- ✓ Significant increase in early & ultimate strengths
- ✓ Higher E modulus
- ✓ Improved adhesion to reinforcing and stressing steel
- ✓ Better resistance to carbonation and other aggressive atmospheric conditions
- ✓ Lower permeability - increased durability
- ✓ Reduced shrinkage and creep
- ✓ Achieve high strength
- ✓ No setting issues at high dosages

PROPERTIES

Appearance	: Colourless to Brown Coloured Liquid
Dry material content (%)	: Min. 50.0 %
Ash content (%)	: 4.0 – 5.0
pH	: Min. 6.0
Specific Gravity at 25 °C	: 1.100 - 1.150
Chloride content	: Nil to 0.2% Max

RECOMMENDED DOSAGE

Typically 1.0 to 1.75% by weight of cement / cementitious is recommended. However optimum dosage of **ENDURACON HGHS** should be determined with trial mixes. 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 PRISM JOHNSON – RMC INDIA representative for additional information on **ENDURACON HGHS** admixture or on its use in developing concrete mixes with special effects of over dosage. A severe over-dosage of **ENDURACON HGHS** can result in the following:

- ❖ Extension of initial and final set
- ❖ Bleed / segregation of mix
- ❖ Increased plastic shrinkage

CAUTION

ENDURACON HGHS 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 HGHS 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 advised to follow MSDS.

PACKAGING & DELIVERY

Delivered in 235 kg HDPE barrels & 10 MT bulk tanker

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

RMC (INDIA) Division

Construction Chemicals Business

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