



ROBUSTO

TECHNICAL DATA SHEET

ROBUSTO HRWRA 999

PRODUCT DESCRIPTION:

ROBUSTO HRWRA 999 is an unique combination of the next generation Hyper-Plasticizer admixture of Nano PCE Molecule Technology. This technology helps to repel the cement particles for longer duration and provides a higher Dense Concrete.

ROBUSTO HRWRA 999 combines the properties of High range water reduction and retardation. It helps to produce the high performance concrete with higher workability.

USES:

ROBUSTO HRWRA 999 is a Hyper – Plasticizer that is specially designed to produce high grade concrete with higher cement / cementitious content with lower W/C ratio.

ROBUSTO HRWRA 999 is used for the following:

- Used for SCC, SDC, Precast Concrete as well as High Performance Concrete.
- Concrete mixtures / Designs with low W/C ratio and/or high powder contents.
- To produce free flow concrete.
- Provides high early strength.
- Capable to pump the concrete to greater heights.

DOSAGE:

Trials should be conducted to determine the optimum dosage of **ROBUSTO HRWRA 999** to meet the performance requirements by using the materials and conditions in actual use. However, the normal dosage ranges between **0.2 to 1.4 %** by weight of total cement or binder content.

TECHNICAL SUPPORT:

Robusto Chemicals provides technical advisory service for on-site assistance and guidance on mix design, optimum dosage evaluation of trials.

ADVANTAGES:

ROBUSTO HRWRA 999 is an advanced PCE based Nano Technology which gives the following:

- Increases retention, controls the heat of hydration and yields high ultimate strength.
- Compatible with cement replacement such as Fly Ash, GGBS and Micro Silica etc.
- Used to produce rich and cohesive mixes with the help of in-built VMA.
- Higher E- Modulus & Lower permeability.
- High efficiency even at a lower dosage.

BENEFITS:

- Used in fast track construction.
- Used for producing high quality Ready Mix Concrete.
- Used in congested Reinforcement Structures.
- Helps to reduce the Cementitious content by reducing W/C ratio

STANDARDS:

ROBUSTO HRWRA 999 complies with IS 9103:1999 and ASTM C494, **Type-G, Water Reducing and Retarding** admixtures depending on the dosage used.

TECHNICAL PROPERTIES @ 25°C:

Colour	: Yellowish to Brownish Liquid.
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pH	: Minimum 6.0
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Specific Gravity	: 1.09 ± 0.02
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Chloride Content	: Nil as per BS 5075
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COMPATIBILITY:

ROBUSTO HRWRA 999 can be used with all types of Portland cement and other cementitious materials. **ROBUSTO HRWRA 999** should not be used in conjunction with other admixtures or can be used only after Consulting ROBUSTO technical department.

EFFECT OF OVER DOSAGE:

Overdosing of **ROBUSTO HRWRA 999** will cause the following:

- May arise unwanted high workability.
- May cause bleeding, segregation. Also stickiness observes.
- May increase in retardation, prolongs the setting time.

PACKAGING:

ROBUSTO HRWRA 999 is available in 225 Kgs drums supply.

STORAGE:

ROBUSTO HRWRA 999 has a shelf life of 12 months from the date of manufacturing If stored at Cool & Dry place and away from the direct sunlight.

CLEANING:

ROBUSTO HRWRA 999 can be washed with fresh cold water.

HEALTH & SAFETY:

ROBUSTO HRWRA 999 is not classified as hazardous material.

ROBUSTO HRWRA 999 should not come into contact with skin and eyes. In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly.

For further information refer to the Material Safety Data Sheet.

FIRE:

ROBUSTO HRWRA 999 is water based concrete admixture and non- flammable.

DISCLAIMER:

The manufacturer reserves the right to change the specifications. RCPL products are guaranteed against material manufactured and are sold subject to the company's Terms and Conditions of Sale. Whilst we endeavour to ensure that advice, specifications, recommendations, and information given is correct, we cannot have control over how our products are applied and will not accept liability, directly or indirectly, arising from application of our materials.

