

# TECHNICAL DATASHEET

## ROBUSTO HRWRA 459

### PRODUCT DESCRIPTION

**ROBUSTO HRWRA 459** is a next generation ready to use high-range water reducing PCE based admixture of polycarboxylate technology. This technology with long chains specially designed to enable the water content of the concrete to perform more effectively.

This effect can be used to create & improve normal strength, high strength and flowable concrete mixes, to achieve higher concrete durability and performance.

### USES

**ROBUSTO HRWRA 459** is a specially designed to produce ready mixed concrete. Additionally, it provides high water reduction and improved fresh concrete characteristics.

**ROBUSTO HRWRA 459** is used for the following:

- High strength and High performance concrete.
- Concrete Mixtures/Designs with low W/C ratio and/or high powder contents.
- Higher Slump retention.
- Used for SCC & SDC.

### DOSAGE

Trials should be conducted to determine the optimum dosage of **ROBUSTO HRWRA 459** to meet the requirements by using the available Raw materials at site. However, the normal dosage ranges between 0.2 to 1.4 % by weight of total cement or binder content.

### TECHNICAL SUPPORT

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

### ADVANTAGES

**ROBUSTO HRWRA 459** is a Advanced PCE based on Nano Technology which gives the following:

- High early and ultimate compressive strengths.
- Increases retardation, controls the heat of Hydration.
- Makes the concrete flowable and helps to have smooth surface finish.
- High efficiency even at 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 459** complies with IS 9103:1999 and ASTM C494, Type G, water-reducing, high range, and retarding admixtures depending on the dosage used.

### TECHNICAL PROPERTIES @ 25°C:

Colour	: Yellowish to brownish liquid
pH	: Minimum 6.0
Specific gravity	: 1.08 ± 0.02
Chloride content	: Nil as per BS 5075

### COMPATIBILITY

**ROBUSTO HRWRA 459** can be used with all types of Portland cement and cementitious

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materials. **ROBUSTO HRWRA 459** should not be used in conjunction with other admixtures or can be used only after Consulting **ROBUSTO's** Technical Department.

### EFFECT OF OVER DOSAGE

Overdosing of **ROBUSTO HRWRA 459** will cause the following:

- Increase in workability.
- May cause bleeding & segregation.
- May cause Flash setting in concrete.

### PACKAGING

**ROBUSTO HRWRA 459** is available in 225 kg drums supply.

### STORAGE

**ROBUSTO HRWRA 459** 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 459** can be washed with fresh cold water.

**ROBUSTO HRWRA 459** 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 459** 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.*

### HEALTH & SAFETY

**ROBUSTO HRWRA 459** is not classified as hazardous material.