



# LayPlast HPR

## Concrete Water Reducing Plasticizer-Retarder ASTM C494 Type D

**PRODUCT DESCRIPTION:** LayPlast HPR is an aqueous chemical admixture that delays the setting time and improves the plasticity of concrete while reducing the amount of water needed for hydration without affecting strength. It is manufactured under rigid control that provides uniform, predictable performance. It is supplied as a dark brown, low viscosity liquid, ready to use as received.

**USES:** LayPlast HPR makes a non-segregating workable mix with up to 15% less water, more than 10 cm of slump reduction and yields a stronger, less permeable and more durable concrete. It is used in Ready mix, Precast, block and other paver and job site plants.

**ADVANTAGES:** LayPlast HPR can be used as finishing enhancers for concrete - particularly

in commercial and residential flatwork and formed concrete applications.

It produce less permeable, more durable concrete.

**LIMITATIONS:** Do not overdose.

**COMPOSITIONS AND MATERIALS:** is an aqueous solution of modified Naphthaline sulfonates containing a retarder and a catalyst which pro-motes more complete hydration of portland cement. It does not contain calcium chloride.

**PACKAGING:** Packed in 200 kg Drums.

**TECHNICAL DATA:** As a plasticizer, LayPlast HPR lessens the particle attraction between cement grains in water. It does this by adsorption on the cement particles thus reducing their tendency to clump together and makes the mix more workable with less water. As a cement catalyst, effects a more complete hydration of the cement. LayPlast HPR increases the gel content of the concrete, and this adds to the water retention and internal cohesiveness of the mix, reducing bleeding and segregation as it increases workability, pumpability and placeability. Concrete mix shall be designed in accordance with the Standard Recommended Practice for Selecting Proportions of Concrete, ACI 211.

**Dose:** Excellent results are obtained using addition rates of 190 to 600 mL of LayPlast HPR per 100 kg of cement. In some cases it may be necessary to adjust the dose due to cement, aggregates or job site conditions.

**Mixing:** Admixture is supplied ready to use. No mixing is required at job site.

**Addition:** Dispense using automatic equipment or manual addition. Add to the concrete mix water.

**Precautions:** This product is a mild irritant. Avoid contact with skin. In case of contact, wash thoroughly with water. For eyes, get medical attention. Keep out of reach of children. It is non-flammable.

**Cleaning:** In case of spill wash with water.

**Storage Life:** One year if stored in cool location. Close partially used containers tightly.

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