



# LayHard

## Concrete Hardener and Water Reducing Plasticizer ASTM C494 Type A

**PRODUCT DESCRIPTION:** LayHard is an aqueous chemical admixture that provides extra hardness, abrasion and impact resistance to concrete and improves its plasticity 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 brown liquid, ready to use as received.

**USES:** LayHard adds extra hardness to concrete floor screeds, road work, precast, block and pavers. It extends the life of concrete surfaces that are subject to abrasion and impact.

**LIMITATIONS:** Do not overdose.

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

**PACKAGING:** Packed in 20 kg Pails.

**TECHNICAL DATA:** The hardening agents in LayHard are unique in their ability to impart extra hardness to the concrete internal structure as well as its surface. As a plasticizer, LayHard 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, it effects a more complete hydration of the cement. Concrete mix shall be designed in accordance with the Standard Recommended Practice for Selecting Proportions of Concrete, ACI 211.1.

**Dose:** Optimum results are obtained using addition rates of 300 to 800 mL of LayHard 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. However, mix for a short time at the job site to avoid settling is recommended.

**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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*Ver. 1/2004*