



EVERLAST CONCRETE
TECHNOLOGIES
BEST PERMANENT CONCRETE PROTECTION

CEMENT HYDRATION CATALYST (CHC)

THE HIGHEST QUALITY HYDRATION AVAILABLE MAKING YOUR CONCRETE BETTER, ONE MIX DESIGN AT A TIME

PRODUCT INFORMATION

WHAT IS CEMENT HYDRATION CATALYST?

CEMENT HYDRATION CATALYST is a clear, environmentally neutral, non toxic, odorless, non VOC or VOS liquid. Concrete containing CEMENT HYDRATION CATALYST at the recommended dosage rate of 10 ounces per hundredweight has been shown to produce concrete with virtually no plastic shrinkage cracking and virtually no curling. As measured per ASTM C-157, it has a shrinkage rate of 0.015.

HOW CEMENT HYDRATION CATALYST WORKS

CEMENT HYDRATION CATALYST is a revolutionary product which has no equal in today's concrete marketplace. Unlike shrinkage reducing admixtures which are added to already-mixed cement, CEMENT HYDRATION CATALYST is added to the mix water before any other components. CEMENT HYDRATION CATALYST changes the chemical composition of the water in such a dramatic way that virtually all of the mix water is used (unlike ordinary concrete where a great deal of bleed water is left over). With 100% of the mix water used for hydration, void content is reduced dramatically and this results in the most durable concrete produced today.

You'll immediately see the difference CEMENT HYDRATION CATALYST makes to your concrete. CEMENT HYDRATION CATALYST creates a very homogenous mix, meaning the ready-mix is consistent all the way through and doesn't separate. Unlike normal batches, the last of the load looks as good as the first. Finishers like CEMENT HYDRATION CATALYST, too. The work ability is very good, and the concrete is easy to finish, you can save up to 25 percent of your normal finishing time.

CEMENT HYDRATION CATALYST is made of only natural ingredients that are non-toxic and environmentally friendly.

USING CEMENT HYDRATION CATALYST

The recommended addition rate for normal batching is 10 fluid ounces per CWT (100 pounds) of Portland cement. CEMENT HYDRATION CATALYST is added directly to the mix water.

Where utilizing a mix water holding tank for variable cement content batching, pour or pump the predetermined volume of CEMENT HYDRATION CATALYST into the mix water holding tank. Add total amount of mix water, then add balance of mix.

As an alternative, CEMENT HYDRATION CATALYST can be poured into a clean, empty transit mixer truck just prior to putting under the batch plant for loading. With the mixer turning in its mixing mode, load approximately 90% of the total planned mix water volume, and then begin loading cement, aggregates and the remainder of the mix water.

ADJUSTING THE MIX

CEMENT HYDRATION CATALYST will enhance any mix design. For optimum benefits, additional water is highly recommended, in the same fashion as a silica fume mix design requires additional water. We recommend a correction of 1.06. With this adjustment, the slump will be approximately 3½-4 inches. If this correction is not made, the slump will be approximately 2-2½ inches.

NOTE It is documented in daily concrete practices that 12 to 15 percent of cement per yard of concrete is not fired off, hydrated, or utilized. So when you're using more of the cement you will need more water.

FINISHING & SET TIMES

Longtime finishers have said they could even go back to their old wooden tools because

- (1) the concrete stays put,
- (2) there's no separation between aggregate and water,
- (3) there's no drag on the finishing tools, and
- (4) there's lots of cream to work with, meaning that workability and finishability are excellent.

CEMENT HYDRATION CATALYST has a slight retarding effect on initial and final set times of about 8 percent. This is advantageous, as it gives finishers more cream for a longer period of time.

THE FINAL PRODUCT

CEMENT HYDRATION CATALYST helps you get to your ultimate compressive strengths more quickly. Independent testing has shown that CEMENT HYDRATION CATALYST can increase compressive strength by as much as 26 percent at 28 days.

COMPATIBILITY AND FLAMMABILITY

CEMENT HYDRATION CATALYST is compatible with all admixtures. CEMENT HYDRATION CATALYST is not combustible or flammable and has no flash point.