

California Department of Transportation
Division of Engineering Services
Materials Engineering and Testing Services
5900 Folsom Blvd.
Sacramento, CA 95819-4612

August 11, 2016

AUTHORIZED CHEMICAL ADMIXTURES FOR USE IN CONCRETE

The list of Authorized Admixtures for Use in Concrete is published and updated periodically for reference primarily by Caltrans field personnel and others involved in Caltrans projects.

As per State of California, Department of Transportation, Standard Specifications (2015), Section 90-1.02E(1), or Standard Specifications (2010), Section 90-1.01D(1), the admixture type and brand must be on the Authorized Material List at the time of mix design submittal.

Admixture brands will be considered for addition to the authorized list if the manufacturer of the admixture submits to the Transportation Laboratory, 5900 Folsom Blvd., Sacramento, CA 95819-4612, a sample of the admixture accompanied by certified test results, which verify that the admixture complies with the requirements in the appropriate ASTM Designation. The sample shall be sufficient to permit performance of all required tests.

Authorization of admixture brands will be dependent upon a determination as to compliance with the specifications, based on the certified test results submitted, together with any tests the Department may elect to perform.

Inquiries regarding this list should be directed to Mr. Thien Thach at (916) 227-5280 or email thien.thach@dot.ca.gov.

The Authorized List includes only those admixtures that comply with the following ASTM designations:

C494 - Standard Specification for Chemical Admixtures for Concrete.

C260 - Standard Specification for Air-Entraining Admixtures for Concrete.

The list provides certain essential data for field reference as well as general information that may assist in assessing properties of the plastic concrete.

The information contained herein, shall not to be used for advertising purposes, nor is it an endorsement by Caltrans.

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NOTES:

Chemical admixtures containing chlorides as Cl in excess of one percent by weight of admixture shall not be used in concrete.

** When the Contractor is permitted to reduce cement content by adding chemical admixtures, the dosage of admixture shall be the dosage used in ASTM Designation C494 for qualifying the admixtures.

*** This admixture provisionally qualified until the one-year strength test results are obtained.

**** Dosage calculated on the quantity of cementitious material and its alkali content.

AE = Air Entrained

NAE = Non-Air Entrained

ADMIXTURE TYPES PER ASTM C494

- Type A - Water-reducing admixtures
- Type B - Retarding admixtures
- Type C - Accelerating admixtures
- Type D - Water-reducing and retarding admixtures
- Type E - Water-reducing and accelerating admixtures
- Type F - Water-reducing, high range admixtures
- Type G - Water-reducing, high range and retarding admixtures
- Type S - Specific Performance Admixtures