GENERAL: The Chemical Admixtures Prequalification Program establishes procedures to ensure that cementitious material meets the requirements of Section 90-1.02E(1) and 90-1.02E(2) in the 2018 Caltrans Standard Specifications and that all chemical admixtures must be on the Authorized Materials List prior to being used on Caltrans projects.

REFERENCE DOCUMENTS

2018 Caltrans Standard Specification Section 90-1.02E: “Admixtures”


DEFINITIONS

Definitions provided in this section are for clarifying terms used within this document.

- **Laboratory** – a facility that provides testing.
  - **Independent Laboratory** – the supplier’s chemical admixtures testing facility. This laboratory will verify the supplier’s quality control and specification compliance testing. The supplier may contract out this work. Documentation from an independent, CCRL/AASHTO accredited lab that includes test results showing compliance with applicable standards. (ASTM C260 for air-entraining admixtures, ASTM C494 for non-air-entraining admixtures). Only laboratories that are participants in the CCRL on-site inspection and proficiency sample program and are accredited for the tests performed from the AASHTO Accreditation Program are recognized as approved laboratories for this program. The Department will periodically verify that the laboratory is maintaining AASHTO Accreditation by viewing the online directory on [www.aashtoresource.org](http://www.aashtoresource.org).
  - **Transportation Laboratory** – the Department’s Materials Engineering and Testing Services (METS) laboratories. Any Department laboratory or Department authorized laboratory shall maintain AASHTO Accreditation for testing of chemical admixtures for chemical and physical properties.

- **Supplier** – an entity manufacturing or distributing chemical admixtures for use on a Caltrans project.
CHEMICAL ADMIXTURES REQUIREMENTS

- Chemical Admixtures must conform to the requirements of Section 90-1.02E of Caltrans Standard Specifications.

APPLICATION TO SUPPLY CHEMICAL ADMIXTURES (NEW PRODUCTS)

The supplier must follow the procedure at https://dot.ca.gov/programs/engineering-services/authorized-materials-lists for products that meet established AML authorization criteria for “Chemical Admixtures for use in Concrete.” Submit application (including TL-9501) to New.Products@dot.ca.gov, with a copy to Francisco Romero, email: francisco.romero@dot.ca.gov including the following:

- An application for each chemical admixture to appear on the list
  - Send the documentation providing information about each material, product description, type, designation and recommended dosage.
  - Documentation from an independent, CCRL/AASHTO accredited lab that includes test results showing compliance with applicable standards. (ASTM C260 for air-entraining admixtures, ASTM C494 for non-air-entraining admixtures).
  - Infrared (IR) curve of the chemical admixture.
  - A brief description of projects where the chemical admixture has been used.
- SDS for each material supplied
- Chemical admixture samples
  A physical sample of the product:
  - 500 mL for liquid samples, in a leakproof container properly labeled with hard copies of the documentation listed above.
  - 1000 g for powder samples, in an airtight container properly labeled with hard copies of the documentation listed above.

Ship the samples and hard copy documentation to:

Transportation Laboratory
Attention: Francisco Romero, Chemical Admixtures Prequalification Program

5900 Folsom Boulevard, Sacramento, CA, 95819

- The New Products Administrator will receive the original request, will notify the Chemical Admixtures Administrator to review the information submitted.

- At the same time, the New Products Administrator will send the SDS for review and acceptance prior to request the physical samples. The review of the SDS may take up to 15 calendar days.

- If the SDS meets the minimum health related requirements, the supplier will be notified to send the physical sample to the Chemical Admixtures Administrator to proceed with the physical testing of the product. Physical testing may take up to 15 calendar days.

- Once the chemical test results are obtained and it is determined that the chemical admixture meets the ASTM requirements, it will be posted in the Department’s Authorized Materials List website and the supplier will be notified via e-mail.

- New chemical admixtures are valid for 5 years. Prior to expire, the supplier will be notified to submit a renewal request to maintain their product in the Department’s Authorized Materials List.

MAINTAINING AUTHORIZED STATUS OF CEMENTITIOUS MATERIALS
(ONGOING RENEWALS)

The supplier must follow the procedure at https://dot.ca.gov/programs/engineering-services/authorized-materials-lists for products that meet established AML authorization criteria for “Chemical Admixtures for use in Concrete.” Submit application (including TL-9502) to New.Products@dot.ca.gov, with a copy to Francisco Romero, email: francisco.romero@dot.ca.gov including the following:

- Information about the chemical admixture, product description, type, designation and recommended dosage.

- Documentation from an independent, CCRL/AASHTO accredited lab that includes test results showing compliance with applicable standards. (ASTM C260 for air-entraining admixtures, ASTM C494 for non-air-entraining admixtures).

- Infrared (IR) curve of the chemical admixture.
• Safety Data Sheet(s), SDS.

• Physical sample.

When the supplier gets notified to ship the physical sample, ship the sample and hard copy documentation to:

Transportation Laboratory

Attention: Francisco Romero, Chemical Admixtures Prequalification Program

5900 Folsom Boulevard, Sacramento, CA, 95819

The rest of the testing and approval process is the same, including the final notification to the supplier and posting of the product renewal in the Department’s Authorized Materials List.