



Minnesota Department of Transportation
Approved Chemical Admixture Program
October 14, 2019

The Minnesota Department of Transportation (MnDOT) will only accept chemical admixtures from the MnDOT Approved/Qualified Products List. This applies to all chemical admixtures sold to contractors for use on MnDOT projects.

For a chemical admixture to be approved by Mn/DOT, a Manufacturer must demonstrate an ability to manufacture admixtures in accordance with MnDOT Specification 3113:

- Class I – Type A, B, C, D, E, F, G, and S Admixtures meeting the requirements of ASTM C-494
- Class II – Air Entraining Admixtures meeting the requirements of AASHTO M 154

The Manufacturer must comply with the following:

A. Manufacturer Quality Control Program

Conduct an internal Quality Control Program. MnDOT may request this Quality Control Program at any time.

B. Reference Samples

Manufacturer shall submit a 1 quart sample for approval to the MnDOT Materials Lab along with an infrared spectrum (IR) of the admixture. Also include a Materials Safety Data Sheet (MSDS) and a Technical Data Information Sheet.

C. Testing

Manufacturer shall provide Independent Testing from a CCRL Laboratory for each admixture. Tests will be performed according to ASTM Standards, or MnDOT Methods as detailed in the MnDOT product specification. Other test methods may be used upon approval by Mn/DOT.

D. Certification

Each admixture shall be accompanied by manufacturers written certification including:

- Typical Dosage Rate
- Compatibility with Fly Ash (and Dosage Rate if different)
- Chloride Content
- Physical Properties

- Total Solids
- PH
- Specific Gravity

E. Approved Products List

MnDOT limits the number of approved products by each manufacturer. They are as follows:

- Type AEA, Air Entrainment - 4
- Type A, Water Reducing Admixture - 6
- Type B, Retarding Admixture - 1
- Type C, Accelerating Admixture - 2; 1 Chloride, 1 Non-chloride
- Type D, Water Reducing and Retarding Admixture - 1
- Type E, Water Reducing and Accelerating Admixture - 1
- Type F, Water Reducing, High Range Admixture - 4
- Type G, Water Reducing, High Range and Retarding Admixture – 1
- Type S, Specific Performance Admixture - 2

F. Field Acceptance

For each approved admixture, MnDOT will begin to collect field samples of these products for comparison to the reference samples you sent us, as stipulated in the most current version of section 6 of ASTM C-494, "Uniformity and Equivalence".

G. Non-Compliance

If future samples of these materials do not meet MnDOT specifications or the uniformity requirements, the product may be removed from the approved product list and subject to other failing material procedures.

Please also note that it is the manufacturer's responsibility to immediately notify MnDOT if the chemical formulation of any product is changed or modified, or if the product is no longer being produced. If our testing determines that the chemical formulation has changed, without prior notification from the manufacturer, the product may be removed from the approved product list.

Reference samples, test data, and certification shall be sent to:

Minnesota DOT
Attention: MnDOT Concrete Engineering Unit
1400 Gervais Ave.
Maplewood MN 55109