

QCML Criteria Anti-Strip Additives

For an Anti-Strip Additive (ASA) to be listed on the Qualified Construction Materials List (QCML), a product must meet the requirements of Subsection M3.01.5 of MassDOT's Standard Specifications. This includes a requirement for a product to be evaluated by AASHTO's National Transportation Product Evaluation Program (NTPEP).

NTPEP Testing

MassDOT Research & Materials (RMS) shall evaluate the NTPEP data. The following criteria must be met as part of the product submission:

- NTPEP testing shall show that the product does not negatively affect:
 - o The performance grade of the asphalt binder.
 - The ASA shall not alter the continuous high or low temperatures of the control by more than 1 degree.
 - o The mixture's Tensile Strength Ratio (TSR) on Granite samples.
 - The ASA TSR shall be a minimum of 80% greater than the control TSR.
 - The ASA wet strength shall be a minimum of 100% greater the control wet strength.
 - o The mixture's hamburg rutting or stripping results on Granite samples.
 - The ASA stripping inflection point shall be a minimum of 25% greater than the control stripping inflection point.
 - o The mixture's boil test on Granite samples.
 - The ASA percent of uncoated particles shall be a maximum of 5%.

MassDOT Requirements and Testing

Manufacturers may request MassDOT evaluation once the NTPEP testing cycle is complete. The following criteria must be met as part of the product submission:

• The manufacturer of the ASA must provide a certification that their product is compatible with polyphosphoric acid modified binders, polymer modified binders, and asphalt rubber binders.

Product Listing, Expiration, and Re-Approval

Once approved, the ASA will be listed on the MassDOT QCML. The product shall remain on the approved list for seven (7) years unless one of the following occurs:

- If the manufacturer does not have the product reevaluated by NTPEP in accordance with the NTPEP ASA workplan.
- If the product's technology changes.
 - If the product formulation or technology changes, the manufacturer shall notify MassDOT RMS.
 - Manufacturers must resubmit products to NTPEP for testing upon any reformulation of the product.
- MassDOT RMS determines that the product no longer meets the minimum requirements.

A written request for re-approval must be submitted to the Department at least <u>60 days</u> prior to the expiration date for the product to remain on the QCML.