New Hampshire Department of Transportation Bureau of Materials & Research

Qualified Products List (QPL) - Qualification Criteria

Section 526 - Concrete Crack Sealers, NHDOT Specifications

QPL Category: 526.A. Item 526.2 - Epoxy for Non-Moving Cracks

Product Requirements

Product Description

Epoxies for non-moving cracks shall be those products specified to bond with Portland cement concrete, reducing the opportunity for water to freely enter the interior of the concrete element. Non-moving cracks are those that have been determined to undergo insignificant changes in width from loading (e.g. crack expansion due to beam flexure), from temperature fluctuations (e.g. thermal expansion and contraction), or from other processes. The product shall have a minimum shelf life of *one year* from the date of manufacture.

Laboratory Test Performance

The product shall meet the requirements of AASHTO M235

- > Type I and/or Type IV (Type I For use in non-load-bearing application for bonding hardened concrete to hardened concrete and other materials, and as a binder in epoxy mortars or epoxy concretes. Type IV For use in load-bearing applications for bonding hardened concrete to hardened concrete and other materials and as a binder for epoxy mortars and concretes).
- Grade I (Low viscosity 2,000 cps Max. [e.g., fine to medium cracks])
- Class B & C (B For use between 40 and 60°F [4 and 15°C] & C For use above 60°F [15°C], with the highest allowable temperature to be defined by the manufacturer of the product).

Required Submissions

Only complete product submittal packets will be considered for review.

The following documents shall be sent to the Department's Product Evaluation Unit (PEU) for its review in consideration of qualifying the product for inclusion in the QPL:

QPL Product Submittal Form

The submitted form must be the current, on-line version of the form, and must be completely filled out. It can be accessed here: https://www.nh.gov/dot/org/projectdevelopment/materials/research/products.htm.

Letter of Compliance

A Notarized letter on the manufacturer's letterhead affirming the product meets all Department requirements described herein.

Product Literature

Current product literature, including technical data sheets and Safety Data Sheets (SDS), relevant to the material's use, limitations, properties, storage, mixing, application/installation, and all precautions for the product, as applicable.

Laboratory Test Results

Product submittals without the required laboratory test documentation will not be reviewed.

VOC Certification

Certification on the manufacturer's letterhead affirming that the product meets all Federal and State requirements for VOC limits.

Laboratory Testing

As part of the evaluation, the Department will review the submitted, required, laboratory test results. Laboratory testing may be conducted through the AASHTO National Transportation Product Evaluation Program (NTPEP), a State transportation agency, or appropriately qualified independent testing laboratory. Test results must be submitted on the testing laboratory's letterhead and the documentation demonstrating that the product meets these requirements must be legible and current. Qualifications of the independent laboratory must also be submitted for review.

Product Performance Monitoring / Removal from QPL

Product field performance and the product's technical data will be monitored by the Department. If either fails to meet the criteria noted herein, the product will be immediately removed from the QPL without notice to the manufacturer.

Changes to Product Name, Manufacturer, or Formulation, of a Currently-Listed QPL Product

The PEU shall be contacted immediately when a change to any of the following is made to a product currently listed in the QPL:

- Product name
- Product manufacturer
- Product formulation

For a change in the product name and/or manufacturer, the product will remain in the QPL reflecting that change only upon receipt of verification from the current or new manufacturer attesting the product formulation is unchanged. Verification shall consist of a letter signed by the manufacturer's representative.

For a change in product formulation, the PEU will determine whether:

- 1. The formulation change could adversely affect the product's required performance, whereupon it will be subject to removal from the QPL; or,
- 2. The formulation change will not adversely affect the required performance of the product for its intended use; whereupon, the product will remain in the QPL.

If at any time it is determined that a product name, manufacturer, or formulation has changed without the required notification to the PEU, the product is subject to immediate removal from the QPL at the discretion of the PEU. The product will not be re-listed in the QPL until the manufacturer provides complete, updated information.

QPL Expiration Date / Product Test Frequency

Qualified products in this QPL section will be listed for *5 years* from the date of the most current laboratory test results documentation. Based on this date, a corresponding expiration date will be assigned and will be shown in the QPL. For the product to be listed in the QPL past its assigned expiration date, the supplier/manufacturer shall submit new laboratory test results documentation that verifies conformance with the current qualification criteria. The test result documentation shall be submitted with sufficient lead time prior to the expiration date to allow for the PEU's review. Products without current acceptable test results documentation will be removed from the QPL upon reaching the expiration date.

Product Marking and Labeling

The product label shall be marked with the information as required by the applicable specification(s). If a product was converted and/or relabeled from its original manufacturer, the product name on all labels and all accompanying literature shall be that of the convertor or private label company.

Limitations

The Department continues to evaluate its qualification criteria as well as products that have been qualified against them, and reserves the right to revise the criteria and/or withdraw product qualification at any time for any reason without notice. Qualification of a product does not constitute an endorsement of the product, nor does it imply intent to purchase or specify the product.

Qualification Criteria Approved by:

Chief of Materials Technology, Materials & Research

Bureau Administrator, Materials & Research