

State of Louisiana  
Department of Transportation and Development (DOTD)  
Materials and Testing Section Approved Materials Procedure  
for

**EPOXY RESIN SYSTEMS**

**MATERIAL SPECIFICATION REFERENCE:**

DOTD Standard Specifications Section 1017, AASHTO M 235, ASTM C881, AASHTO M 237 Supplemental Specifications and Special Provisions.

**APPROVED MATERIAL EVALUATION SUBMITTAL:**

The manufacturer shall submit a completed Approved Materials Evaluation Submittal to the DOTD Materials and Testing Section Coordinator listed below.

**PRELIMINARY REQUIREMENTS:**

The complete submittal must include:

- Complete Approved Materials Evaluation Form
- Letter requesting evaluation of the material
- Product Data Sheets
- Manufacturer's specifications
- Safety Data Sheet (SDS)
- Sample
- Independent Laboratory Test Results
- AASHTO National Transportation Products Evaluation Program (NTPEP) Results

The address of the contact affiliated with AASHTO NTPEP is:

NTPEP Coordinator  
AASHTO National Transportation Products Evaluation Program  
444 N. Capitol St. N.W.  
Suite 249  
Washington, D.C. 20001  
Phone: (202) 624-3695  
Fax: (202) 624-5806  
<http://data.ntpep.org>

For detailed information, refer to the Operational Procedures of the AASHTO NTPEP available from the NTPEP Coordinator.

NOTE: Evaluation will not begin until all required items listed above are received by the Materials Laboratory

## **PRELIMINARY REQUIREMENTS CONTINUED:**

### Certifications and/or Test Reports

Prior to submitting an "Approved Materials Evaluation Form" to the Materials and Testing Section, the manufacturer shall have successfully completed the requirements of the AASHTO NTPEP for "Epoxy and Resin Based Adhesive Bonding Systems" and/or "Raised Pavement Markers/Snowplowable Raised Pavement Markers". The laboratory results obtained from the AASHTO NTPEP report will be used to determine conformance of the material to LA DOTD's Standard Specification.

For all epoxy systems and adhesives, the manufacturer shall provide a Certificate of Analysis (CA) by an independent laboratory showing the required physical and chemical properties in accordance with LA DOTD's Standard Specifications.

Product Data Sheets shall provide all pertinent information relative to the material to be evaluated, including but not limited to:

- Manufacturer's specifications
- Intended use of the material
- Mixing instructions
- Material limitations
- Typical analysis

### Sample (to be furnished at no cost to the Department)

The manufacturer shall submit a sufficient amount of each component to ensure a minimum of two (2) gallons of mixed epoxy at the recommended mixing ratio of components A and B. The sample shall include a sufficient amount of aggregate (component C) for Type III systems intended for use with the manufacturer's recommended aggregate. Additional material may be required for a field evaluation.

## **TEST REQUIREMENTS:**

### Laboratory Testing

The sample will be tested for the types, grades and classes in accordance with the applicable test procedures as described in Section 1017 of the LA DOTD Standard Specifications. The gel time may be determined by the use of an automatic gel timer.

### Field Evaluation

The Department may require a field evaluation to ensure satisfactory installation and performance of the epoxy resin system prior to placement on the Approved Material List (AML). The compatibility of the epoxy resin system in reference to bonding of materials for a period of time will be a factor in acceptance of the epoxy resin system.

### Evaluation Time (6 Months)

**GENERAL:**

Upon completion of the evaluation, the submitter will be notified in writing concerning the results of the evaluation and whether the system will or will not be added to the Approved Materials List (AML). The DOTD Materials and Testing Section Coordinator shall be notified in writing of any change from the original system submittal. The Department reserves the right to re-evaluate any system or individual material at any time. A Certificate of Analysis (CA) of the system shall be submitted every two (2) years to the DOTD Materials and Testing Section Coordinator to remain on the AML.

It is also the manufacturer's responsibility to supply the contact information of the representative responsible for the material to the Materials Section Coordinator to remain on the AML. This is done by completing the Approved Materials Evaluation Form every two (2) years or when there is a change in the manufacturing representative responsible for the material.

**PROJECT ACCEPTANCE REQUIREMENTS:**

The inclusion of any material on the AML is not blanket approval for its use. All materials, regardless of prior approval, shall be sampled in accordance to the Materials Sampling Manual. Final acceptance of each lot or shipment is dependent upon test results which shall conform to the established specification requirements and which identify the sample as being representative of the material originally approved.

All Epoxy Resin Adhesives for bonding traffic markers, regardless of prior approval, shall be sampled in accordance with the Materials Sampling Manual. See LA DOTD Designation: S606 for details. Sampling for acceptance of traffic markers may be performed at the applicator's warehouse or other storage facility. When pre-sampled in this manner, each DOTD lot of adhesive shipped to the jobsite shall be accompanied with a Certificate of Compliance (CC). This CC shall include the test report number which indicates conformance to the specifications and represents the material shipped.

When Epoxy Resin Adhesives for bonding traffic markers has not been pre-sampled at the applicator's warehouse or other storage facility, the Project Engineer (PE) shall notify the District Laboratory to take samples at the project site in accordance with LA DOTD S606.

**DISQUALIFICATION AND REMOVAL:**

Any system or material may be removed from the AML at any time. Causes for removal from the AML may include, but are not limited to the following:

- Non-conformance with specifications
- Performance requirements
- Failure to notify the Department of any change in material formulation
- Failure of the supplier to provide proper certifications as required by this procedure
- Failing test results obtained by the Materials Section of project verification samples
- Failure to supply current contact information for the material representative in accordance with this procedure

**REQUALIFICATION:**

Any system which has been disqualified and/or removed from the AML will be considered for re-evaluation only after submission of a formal request along with acceptable evidence that the problems causing the disqualification and/or removal have been resolved.

**DOTD MATERIALS AND TESTING SECTION COORDINATOR:**

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Approved 07/17/18

A handwritten signature in blue ink, appearing to read 'B. Owens', is written over the printed name of Brian Owens.

BRIAN OWENS, P.E.  
DOTD MATERIALS ENGINEER ADMINISTRATOR