



**INDIANA DEPARTMENT OF TRANSPORTATION
DIVISION OF MATERIALS AND TESTS**

**QUALIFIED PRODUCT LIST REQUIREMENTS FOR
ORGANIC ZINC PRIMER AND WATERBORNE COATINGS**

ITM No. 607-23

1.0 SCOPE.

- 1.1. This procedure covers the requirements for a coating manufacturer's products or formulations to be considered for inclusion on, maintained on, or removed from the Department's QPL.
- 1.2. This ITM may involve hazardous materials, operations, and equipment and may not address all of the safety problems associated with the use of the test method. The user of the ITM is responsible for establishing appropriate safety and health practices and determining the applicability of regulatory limitations prior to use.

2.0 REFERENCES.

2.1. ASTM Standards.

D16 Terminology for Paint, Related Coatings, Materials, and Applications

3.0 TERMINOLOGY.

- 3.1. **Terms and Abbreviations.** Definitions for terms and abbreviations shall be in accordance with the Department's Standard Specifications, Section 101 and ASTM D16.

- 4.0 **SIGNIFICANCE AND USE.** This ITM includes the procedures a product must undergo for consideration for inclusion on the Department's QPL for Coating Formulations (formulation of waterborne finish paints and organic zinc primers). The coatings require inclusion on the respective QPL prior to a manufacturer furnishing any of these materials.

5.0 GENERAL REQUIREMENTS.

- 5.1. The procedure for review of products or formulations for consideration for inclusion on the QPL requires the submittal of a QCP. The QCP shall include as appropriate to the coatings, but not limited to, the following:
 - 5.1.1 Name and location of the source or manufacturer
 - 5.1.2 List of the material and Standard Specification section reference for the material that is being requested for consideration

- 5.1.3 Name, address, and telephone number of the responsible contact person
- 5.1.4 Production process of the material
- 5.1.5 Quality parameters of the material
- 5.1.6 Finished material sampling and testing procedures and frequency
- 5.1.7 Titles and qualifications of sampling and testing personnel
- 5.1.8 Location and telephone of the laboratory testing office
- 5.1.9 Statistical analysis of test results

The QCP shall be signed and dated by the manufacturer's representative at the time the QCP is submitted. The QCP shall be maintained to reflect the current status and revisions shall be provided to the Division of Materials and Tests in writing or in an acceptable electronic format.

- 5.2 **Regulations.** All coatings shall comply with current IDEM VOC regulations, and the cured film of the coatings shall not contain toxic heavy metals above IDEM regulatory levels that would require classification as a hazardous waste.
- 5.3 **Change of Formulation.** Any coating that has a formulation changed after being placed on a QPL will be removed from the QPL. All coatings are subject to testing by the Department using chemical and physical methods other than those specified in the material specifications.
- 5.4 **Submissions for Consideration.** A manufacturer's submission for consideration for inclusion of a coating formulation is limited to three submittals of the formulation during a calendar year. Each of the submittals shall include the results of testing for all of the specified properties listed in the specifications.
- 5.5 **AASHTO PEAS Report.** A certified report from AASHTO PEAS including test results for the coating formulation will be accepted as the certified test report required for consideration of the formulation or system. The PEAS report shall indicate specific identification of the formulation.
- 5.6 **Requirements for Coating Formulations.** The specific requirements for the consideration for inclusion on the QPL, maintaining standing on the QPL, and removal from the QPL of the formulations found in the applicable sections of this ITM as follows:

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- 5.7 Maintaining Standing on the QPL of Coating Formulations.** Samples of each batch of the coatings will be obtained randomly for verification at the source or at the point of incorporation into the work in accordance with 106.02.

The manufacture shall provide written notification of any changes, revisions or updates of the SDS, source name or address, contact person or product name to the Division of Materials and Tests.

- 5.8 Removal from the QPL of Coating Formulations.** Reasons for removing a coating formulation from the QPL will be, but not limited to, the following:

5.8.1 Test failures determined by verification sampling

5.8.2 QCP changes without written notification

5.8.3 Change of formulation

5.8.4 If ten consecutive years elapse without furnishing the coating for Department contracts

5.8.5 Performance of the coating no longer meets the intended purpose

- 5.9 Reinstatement of a Coating Formulation to the QPL.** If a coating formulation is removed from a QPL, a minimum of 13 full months must elapse prior to the manufacturer resubmitting the product for consideration. If the product is resubmitted, it will be treated as a new submittal. All of the requirements of the Standard Specifications and all applicable sections of this ITM shall be followed.

6.0 ORGANIC ZINC PRIMERS.

- 6.1 Consideration for Inclusion on the QPL.** A manufacturer requesting inclusion on the Department's QPL, shall provide to the Division of Materials and Tests the following:

6.1.1. A QCP in accordance with 5.1

6.1.2. An SDS

6.1.3. A product data sheet

6.1.4. A certified test report from the manufacturer's testing laboratory or an independent testing laboratory showing test results for all of the specified qualitative and resistance requirements within the specifications. The report shall state the manufacturer's name, formulation identification, date of manufacture, batch number and the beginning and ending dates of

resistance tests. The test report shall not be more than two years old at the time of submittal.

- 6.1.5. An infrared spectrum of the extracted vehicle from the finished paint, and on multi-component paints an infrared spectrum of each liquid component and an infrared spectrum of the extracted vehicle from the mixed paint
 - 6.1.6. The mix ratio by mass of each component for multi-component primers
 - 6.1.7. Documented information detailing the past history and experience with the specific formulation in terms of service life and specific conditions of use.
 - 6.1.8. Upon review and acceptance of the specified submittal, the manufacturer shall provide at no cost to the Department a sample for initial verification testing. The sample container shall be clearly labeled with the formulation identification, manufacturer's name, date of manufacture, batch number, and all health and safety warnings as required by OSHA Hazard Communication Standards.
- 6.2. **Maintaining Standing on the QPL.** Zinc primer formulations will be maintained on the QPL in accordance with 5.7.
- 6.3. **Removal from the QPL.** Zinc primer formulations will be removed from the QPL in accordance with 5.8.

7.0 WATERBORNE FINISH PAINT.

- 7.1. **Consideration for Inclusion on the QPL.** A manufacturer requesting inclusion on the Department's QPL, shall provide to the Division of Materials and Tests the following:
- 7.1.1. A QCP in accordance with 5.1
 - 7.1.2. An SDS
 - 7.1.3. A product data sheet
 - 7.1.4. A certified test report from the manufacturer's testing laboratory or an independent testing laboratory showing test results for all of the specified qualitative and resistance requirements within the specifications. The report shall state the manufacturer's name, formulation identification, date of manufacture, batch number and the beginning and ending dates of resistance tests. The test report shall not be more than two years old at the time of submittal.
 - 7.1.5. An infrared spectrum of the extract vehicle portion of the finished paint

- 7.1.6. Documented information detailing the past history and experience with the specific formulation in terms of service life and specific conditions of use. The documentation shall include details about durability and the successful coating performance for a minimum of three years.
- 7.1.7. Upon review and acceptance of the specified submittal, the manufacturer shall provide at no cost to the Department a sample for initial verification testing. The sample container shall be clearly labeled with the formulation identification, manufacturer's name, date of manufacture, batch number, and all health and safety warnings as required by OSHA's Hazard Communication Standard.
- 7.2. **Maintaining Standing on the QPL.** Waterborne finish paint formulations will be maintained on the QPL in accordance with 5.7.
- 7.3. **Removal from QPL.** Waterborne finish paint formulations will be removed from the QPL in accordance with 5.8.

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