

**GREEN-COLORED PAVEMENT MARKING MATERIALS.
(REV 10-20-22)**

The following new Section is added after Section 975:

**SECTION 976
GREEN-COLORED
PAVEMENT MARKING MATERIALS**

976-1 General Requirements.

976-1.1 Approved Product List Requirements: To qualify for the Approved Product List (APL), manufacturers will submit products to the Department for evaluation. The Department will test all green-colored pavement marking materials in accordance with FM 5-622. Manufacturers must identify the materials for all components of the green-colored pavement marking materials system and submit samples to State Material Office for Fourier Transform Infrared Spectroscopy (FTIR) analysis.

976-1.2 Packaging and Labeling: The name and address of the manufacturer shall be shown on the label. The label must also show the color, date of manufacture, and lot number. The label shall warn the user of any special handling or precautions of the material, as recommended by the manufacturer. Any packaging and labeling not so marked will not be accepted.

976-1.2.1 Two Reactive Components: The two reactive component material containers shall be clearly marked with the volume of materials in units of gallons and the product name.

976-1.2.2 Preformed Thermoplastic: The thermoplastic material shall be packaged in suitable biodegradable or thermo-degradable containers which will not adhere to the product during shipment and storage. Clearly mark each container with the thickness of the preformed material in units of inches.

976-1.3 Storage: All materials must have a shelf life in accordance with the manufacturer's recommendations.

976-1.4 Initial Performance Requirements: The green-colored pavement marking materials shall meet the following performance requirements and will be tested in accordance with FM5 622 – Part A.

976-1.4.1 Friction Resistance: The surface of the pavement markings shall provide a Dynamic Friction Test (DFT40) value of 50 or greater.

976-1.4.2 Color: The daytime luminance factor (Y) must be greater than or equal to 15. The daytime chromaticity (x, y) must fall within the box created by the following coordinates:

	1	2	3	4
x	0.230	0.266	0.367	0.444
y	0.754	0.460	0.480	0.583

Must be used with Dev714GCPM

BABA Compliant

Use on lettings 1-1-23 and later

976-1.5 In-Service Performance Requirements: Green-colored pavement marking materials shall maintain the following performance requirements at the end of the three-year period and will be tested in accordance with FM5-622 – Part B.

976-1.5.1 Friction Resistance: The surface of the pavement markings shall provide a Dynamic Friction Test (DFT40) value of 40 or greater.

976-1.5.2 Wear: Wearing of the material coating shall not expose more than 15% of the underlying surface area.

976-1.5.3 Pavement Distress: Pavement distress occurring after installation of green-colored pavement marking materials may result in removal from the IPL, and require the manufacturer to mill, resurface, replace, and install with a product on the IPL at no additional cost to the Department.

976-1.6 Additional Requirements: Pavement marking materials shall be characterized as non-hazardous as defined by Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Provide supporting independent analytical data or product material safety data sheets (SDS) identifying any components listed in Table 976-1 of 40 CFR 261.24. Additionally, glass elements shall contain no more than 200 ppm by weight of lead or arsenic when tested in accordance with the Environmental Protection Agency (EPA) Testing Methods 3052, 6010B, and 6010C.

Submit installation instructions including the number of coats and the thickness of each coat, if applicable.

976-2 Composition.

The product installed shall consist of high-quality materials, producing an adherent, weather-resistant, friction-resistant, wear-resistant surface, and shall be uniformly distributed throughout the cross-sectional area. Color shall be integral and consistent throughout the installation.

976-3 Manufacturer's Warranty.

The manufacturer must provide a three-year manufacturer's warranty to the Department. At a minimum the warranty must include that the product is warranted by the manufacturer for this specification intended use, meets stated minimum requirements and conditions of this specification, and is unchanged from materials, formulation, installation methods, and performance and test values as submitted to the Department. The manufacturer's warranty shall be satisfactory to the Department and requires the manufacturer to provide and maintain a listing of projects/locations where the product has been installed.