

EXPECTED IMPLEMENTATION JANUARY 2010

413 HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) – MATERIALS. (REV 3-5-09) (FA 3-30-09) (1-10)

SUBARTICLE 413-3.2 (Page 403) is deleted and the following substituted:

413-3.2 Materials: The methacrylate system must be a three component system consisting of: a) methacrylate monomer, b) cumene hydroperoxide (CHP) initiator, and c) cobalt promoter. Use a HMWM monomer that is approved by the Department and included on the Department's Qualified Products List. Use initiator and promoter approved by the monomer manufacturer. Manufacturers seeking evaluation of their products must submit an application conforming to the requirements of Section 6 along with the following documentation:

1. Manufacturer's material installation instructions showing the product can be installed in accordance with this Section.

2. Independent laboratory test data and results showing the product has been tested in accordance with the requirements of this Section and meets the requirements.

413-3.2.1 Properties: Use a methacrylate material that meets the following physical and performance requirements:

Viscosity (Brookfield RVT)	14-20 cps at 50 rpm
Density (ASTM D-1481)	8.5 - 9.0 lb/gl at 77° F
Flash Point (ASTM D-93)	> 200 °F (Pensky Martens CC)
Odor	Low
Bulk Cure Speed	3 Hours @ 73° F (max.)
Surface Cure	8 Hours @ 73° F (max.)
Gel Time (ASTM 2471)	60 minutes (max.)
Tack Free Time	5 Hours (max.) (at 72 °F and 50% Relative Humidity)
Compressive Strength (AASHTO T-106)	6,500 psi (min)
Tensile Strength (ASTM C-307)	1,300 psi (min)
Shear Bond Adhesion (ASTM C-882)	600 psi (min)
Wax Content	0

The monomer shall have a shelf life of no less than 12 months and shall be no more than 8 months old at the time of application. Provide each container shipped to the job site with the following information on a manufacturer's label: manufacturer's name, product name, lot or batch number, date of production, and drum serial number. Identify the catalysts by their generic classification and provide the date of manufacture.

413-3.2.2 Sand: Use uniformly graded 6-20 (or similar), clean, bagged, blast sand for spreading over the applied polymer on bridge decks and other riding surfaces. Certify that the sand has a maximum moisture content that does not exceed 0.25% and that the maximum amount of dust or other material that may pass through a No. 200 sieve (-200 content) is not greater than 0.75%.

Store the sand at a location that will preserve the above described conditions and characteristics of the sand until applied.

EXPECTED IMPLEMENTATION JANUARY 2010