

ORIGINATION FORM

Date: Nov. 9, 2011

Originator: Chester Henson

Contact Information: 414-4117

Specification Title: Traffic Marking Materials

Specification Section, Article, or Subarticle Number: Section 971

Why does the existing language need to be changed? Section 971-3 was changed to reduce the titanium dioxide content to 1.0#/gal. which is consistent with the Federal Specification. Due to the high performance requirements of our thermoplastic materials and that our current titanium dioxide in these materials is consistent with AASHTO and other state specifications, the titanium dioxide content was not reduced. Section 971-5 was changed to increase the service life to correspond to the latest test deck evaluation.

Summary of the changes: Section 971-3.2 Composition (Standard Waterborne Fast Dry Traffic Paint), the titanium dioxide content for white materials was reduced from 1.5#/gal. to 1.0 #/gal. Section 971-5.5.2 Retroreflectivity (Thermoplastic Materials for Traffic Stripes), the service life was increased from three years to five years.

Are these changes applicable to all Department jobs? Yes.

If not, what are the restrictions?

Will these changes result in an increase or decrease in project costs? If yes, what is the estimated change in costs? Due to current demand for titanium dioxide and limited production, and increased costs of titanium dioxide, the change should keep costs of paint markings from increasing. The change in service life for thermoplastic will not impact project costs.

With who have you discussed these changes? Specification and Construction offices

What other offices will be impacted by these changes? None

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? No

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? No

Contact the State Specifications Office for assistance in completing this form.
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ANANTH PRASAD, P.E.
SECRETARY

M E M O R A N D U M

DATE: November 22, 2011

TO: Specification Review Distribution List

FROM: Rudy Powell, Jr., P.E., State Specifications Engineer

SUBJECT: Proposed Specification: **9710302 Traffic Marking Materials.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Chester Henson to reduce the titanium dioxide content to 1.0#/gal. which is consistent with the Federal Specification. Article 971-5 was changed to increase the service life to correspond to the latest test deck evaluations.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at SP965RP or rudy.powell@dot.state.fl.us. Comments received after **December 20, 2011**, may not be considered. Your input is encouraged.

RP/cah
Attachment

TRAFFIC MARKING MATERIALS.
(REV 11-14-11)

SUBARTICLE 971-3.2 (of the Supplemental Specification) is deleted and the following substituted:

971-3.2 Composition:

Component	Test Method	Criteria
Total Solids, by weight	ASTM D 2369	minimum 75%
Pigments, by weight	ASTM D 3723	minimum 57%
Vehicle Solids % of Vehicle*		minimum 40%
TiO ₂ , Type II Rutile (white paint only)	ASTM D 476	minimum 1.05 lb/gal
Volatile Organic Content, (VOC)	ASTM D 3960	maximum 150 g/L
*Vehicle Solids % of Vehicle = $\frac{\% \text{ total solids} - \% \text{ pigment}}{100 - \% \text{ pigment}}$		

SUBARTICLE 971-5.5.2 (of the Supplemental Specification) is deleted and the following substituted:

971-5.5.2 Retroreflectivity: The white and yellow pavement markings shall attain an initial retroreflectance of not less than 450 mcd/lx·m² and not less than 350 mcd/lx·m², respectively. The retroreflectance of the white and yellow pavement markings at the end of the ~~three~~five year service life shall not be less than 150 mcd/lx·m².