

ORIGINATION FORM

Date: 10/25/13

Originator: Greg Sholar

Contact Information: 352.955.2920; gregory.sholar@dot.state.fl.us

Specification Title: Ground Tire Rubber for Use in Asphalt Rubber Binder

Specification Section, Article, or Subarticle Number: 919

Why does the existing language need to be changed? Refinement of specification.

Summary of the changes: Corrected an omission related to the gradation requirements and updated an AASHTO test method version.

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? No.

If yes, what is the estimated change in costs? N/A.

With who have you discussed these changes? Suppliers, FDOT staff, and Asphalt Contractors' Association of Florida.

What other offices will be impacted by these changes? SMO only.

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

Are all references to external publications current? N/A.

If not, what references need to be updated (please include changes in the redline)?

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

Contact the State Specifications Office for assistance in completing this form.

Daniel Scheer 850-414-4130 daniel.scheer@dot.state.fl.us

Frances Thomas 850-414-4101 frances.thomas@dot.state.fl.us

Debbie Toole 850-414-4114 deborah.toole@dot.state.fl.us

Andy Harper 850-414-4127 clifton.harper@dot.state.fl.us

Ray Haverty 850-414-4129 ray.haverty@dot.state.fl.us



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

MEMORANDUM

DATE: November 13, 2013

TO: Specification Review Distribution List

FROM: Daniel Scheer, P.E., State Specifications Engineer

SUBJECT: Proposed Specification: **9190000 Ground Tire Rubber for Use in Asphalt Rubber Binder.**

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

This change was proposed by Greg Sholar of the State Materials Office (SMO) to clarify the gradation requirements and to update a referenced industry standard.

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 SP965DS, or daniel.scheer@dot.state.fl.us. Comments received after **December 11, 2013**, may not be considered. Your input is encouraged.

DS/dt
Attachment

**GROUND TIRE RUBBER FOR USE IN ASPHALT RUBBER BINDER.
(REV 10-25-13)**

SECTION 919 is deleted and the following substituted:

**SECTION 919
GROUND TIRE RUBBER
FOR USE IN ASPHALT RUBBER BINDER**

919-1 Description.

This Section governs ground tire rubber for use in asphalt rubber binders for use in a variety of paving applications.

919-2 General Requirements.

The ground tire rubber shall be produced from tires and shall be sufficiently dry so as to be free flowing and to prevent foaming when mixed with asphalt cement. The rubber shall be substantially free from contaminants including fabric, metal, mineral, and other non-rubber substances. Up to 4% (by weight of rubber) of talc or other inert dusting agent, may be added to prevent sticking and caking of the particles.

The ground tire rubber used shall be one of the products listed on the Department's Qualified Products List (QPL). Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6.

919-3 Physical Requirements.

The physical properties of the ground tire rubber shall be determined in accordance with FM 5-559, and shall meet the following requirements:

Specific Gravity	1.06 to 1.20
Moisture Content	Maximum 0.75%
Metal Contaminants	Maximum 0.01%
Gradation.....	<i>Minimum</i> 98% Passing the No. 30 Sieve

919-4 Chemical Requirements.

The chemical composition of the ground tire rubber shall be determined in accordance with ASTM D297-~~93~~-13 and shall meet the following requirements:

Acetone Extract.....	Maximum 25%
Rubber Hydrocarbon Content	40 to 60%
Ash Content	Maximum 8%
Carbon Black Content.....	20 to 40%
Natural Rubber.....	16 to 45%

919-5 Packaging and Identification Requirements.

The ground tire rubber shall be supplied in moisture resistant packaging such as either disposable bags or other appropriate bulk containers. Each container or bag of ground tire rubber shall be labeled with the manufacturer's designation for the rubber and the specific type, maximum nominal size, weight and manufacturer's batch or LOT designation.

919-6 Certification Requirements.

The Contractor shall provide the Engineer a certification conforming to the requirements of Section 6 from the manufacturer, confirming that the ground tire rubber meets the requirements of this Section.