



Standard Test Procedures Manual

Section: EMULSIFIED ASPHALT

Subject: PARTICLE CHARGE

1. SCOPE

1.1 Description of Test

The particle charge test is used to determine whether the emulsion is anionic (negative) or cationic (positive). A sample of emulsion is placed in a container and a direct current is passed through it via electrodes. After 30 minutes the electrodes are examined to determine which has asphalt deposited on it. An anionic emulsion will deposit asphalt on the anode (positive electrode) while cationic emulsion will deposit asphalt on the cathode (negative electrode).

2. APPARATUS AND MATERIALS

2.1 Equipment Required

See ASTM D244, Vol. 4.03.

3. PROCEDURE

3.1 Test Procedure

See ASTM D244, Vol. 4.03.

4. ADDED INFORMATION

4.1 References

See ASTM D244, Vol. 4.03.

N.S.C. CAN 2-16.2-M77.

4.2 General

The asphalt deposit will be found on the anode for anionic emulsions, and shall be continuous and opaque. In the event of a dispute, repeat the test using freshly distilled water as the wash water for the electrodes, before evaluating the asphalt deposit.

Standard Test Procedures Manual

STP 203-10

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APPROVAL SHEET

New Revision X Date of Previous Document 86-04-08

Effective Date: - -

Description of Revision (Reason for Revision):

- Format of test procedure updated.

Review/Implementation Process:

- Reviewed by the Materials Section of the Technical Standards and Policies Branch.

Other Manuals/Policies Affected:

Nil

Follow Up/Training Required:

Nil

Comments/Concerns/Implications (Budget/Environment/Stakeholders):

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Electronic File Updated
Update Mailed

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