1. **SCOPE**

1.1. **Description of Test**

The Float Test is used as a measure of consistency for distillation residues. Residue from the emulsion is cast in a tapered collar, and then it is allowed to float in a testing bath at a specified temperature. The time, in seconds, between placing the apparatus on the water and the water breaking through the material shall be taken as a measure of the consistency of the material under examination.

2. **APPARATUS AND MATERIALS**

2.1. **Equipment**

Float test equipment including float and thimble as described in ASTM D139, Section 5.

Coat the brass plate with a 1:100 mixture of Versamid and Castor Oil.

Water bath at 60° ± 0.5°C.

Ice bath.

Spatula.

Thermometer, ASTM No. 20C (57°C to 65°C), length 275 mm.

Watch or clock with a second hand.

3. **PROCEDURE**

3.1. **Testing Procedure**

Pour the sample immediately after completion of distillation into a suitable preheated container and then into the float thimble.
Place the thimble threaded side down, on the coated brass plate.

Fill the thimble with asphalt until slightly more than level with the top.

Allow the asphalt to cool to room temperature for 30 minutes.

Place the plate and thimble in the ice bath for 5 minutes.

Trim the material flush to the top of the thimble with a slightly heated spatula.

Place again in the ice bath for a period of 30 minutes.

Screw the thimble onto the float and immerse the entire assembly in the ice bath for 1 minute.

Take the assembly out of the ice bath and float it on the water bath heated to 60°C.

Measure the time in seconds from the instant the float is put on the water bath until the water breaks the material and enters the float.

4. **ADDITIONAL INFORMATION**

4.1. **General**

The float value is one of the prime characteristics for identifying "high float" asphalt emulsions. This high float characteristics enables softer asphalt materials to remain in place on the roadway without running off.

4.2. **References**

ASTM D139, Volume 04.03  
ASTM D244, Section 66, Volume 04.03  
N.S.C. CAN 2-16.5-M84, Par. 6.2.6
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. Renamed - previously 203-16._

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):

Prepared and Recommended by  _D. MacLeod_ __________________________________________ 93-05-06
Materials Standards Engineer Date

Approval Recommended by  _R.A. Widger_ __________________________________________   - -
Senior Materials Engineer Date

Approval Recommended by  _A.R. Gerbrandt_ __________________________________________ - -
Dir., Technical Standards & Policies Br. Date

Approved by  _D.G. Metz_ ___________________________________________ - -
Assistant Deputy Minister, Infrastructure Date

Electronic File Updated - -
Update Mailed _______ ______