COLD POUR CRACK SEALANT – RATE OF CURING

1.0 SCOPE

1.1 This test method describes the procedures for determining the Rate of Curing of rubberized asphalt emulsion crack sealant.

2.0 APPARATUS AND PROCEDURES

2.1 Apparatus:
- Metal container with flat bottom and vertical walls, diameter about 55 mm wall height 6.5 to 8 mm (lids from 3 oz seamless ointment tins are satisfactory).
- Analytical Balance

2.2 Weigh a clean dry metal container to accuracy of 0.001 gram and fill with emulsion sample to a depth of 6 mm and immediately weigh the containers plus contents (the required depth is obtained with 15 to 16 grams of emulsion if the specified 55 mm diameter containers are used).

Allow the specimens to cure in a controlled atmosphere at 23°C (± 1°) and 50% R.H. Reweigh the specimens at the end of 24 hours and 6 days of curing. In case of dispute the air velocity over test specimens shall be controlled to approximately 61 m/min.

3.0 CALCULATION AND REPORT

3.1 The Rate of Curing is expressed in terms of the % of original water lost as follows:

$$\%\ water\ lost = \frac{(B - C)\ x\ 100}{(B - A)\ x\ D}$$

Where:

A = Weight of container
B = Weight of container plus emulsion sample
C = Weight of container plus cured material
D = % of water in the emulsion expressed as its decimal equivalent (1 - the decimal equivalent of solids content determined as described in ASTM D244 procedure A)

3.2 Report the percent water lost after 24 hours and 6 days of curing.