

## CHEMICAL INTERACTION TESTS FOR TRAFFIC LOOP ENCAPSULANT

1. SCOPE: These tests were designed to measure the effect of various chemicals on traffic loop encapsulant.
2. APPARATUS -
  - 2.1. Provide rectangular plates, and templates that conform to ASTM C 679, *Standard Test Method for Tack-Free Time of Elastomeric Sealants*.
  - 2.2. Provide a spatula, capable of striking off the sample surface to a uniform thickness.
  - 2.3. Provide a glass beaker large enough to hold traffic loop sample and enough of the selected chemical to cover the sample.
3. SAMPLE: Ensure the test samples are of a uniform thickness.
4. PROCEDURE -
  - 4.1. Condition and prepare the five test samples according to 8.2-8.3 of ASTM C 679, *Standard Test Method for Tack-Free Time of Elastomeric Sealants*. Let samples cure for seven days.
  - 4.2. Immerse one traffic loop encapsulant sample in each of the following: motor oil (20W50), deicing chemicals (5% CaCl and NaCl solutions), gasoline, and hydraulic brake fluid (DOT 3).
  - 4.3. Allow samples to remain immersed for 24 hours.
  - 4.4. Record any changes in the traffic loop encapsulant.

5. REPORT: Results of these tests will be reported pass/fail. For a passing result, no effect should result from immersion in motor oil, deicing chemicals, or hydraulic brake fluid. The gasoline sample is allowed a slight swell.

APPROVED

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DATE 02/21/08

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