

**Standard Method of Test for
Determination of Cement Sample Contamination By Use of
Phenolphthalein Indicator**

SCDOT Designation: SC-T-52 (7/09)

1. SCOPE

- 1.1 This test method outlines the procedure for determining whether cement is present in a sample. This procedure is to be used when contamination is suspected due to abnormally low or high fineness, high insoluble residue, or evidence of visible contamination during sieving.

2. REFERENCED DOCUMENTS

- 2.1. Lange's Handbook of Chemistry

3. APPARATUS

- 3.1. Weighing Paper or suitable container
- 3.2. Dropping Bottle or plastic disposable pipette
- 3.3. Phenolphthalein Indicator Solution

4. TEST SPECIMENS

- 4.1. Representative sample of cement

5. PROCEDURE

- 5.1. Stir or hand shake sample of cement.
- 5.2. Using a spatula, place one or two scoops of cement on a weighing paper or in a suitable container.
- 5.3. Using a dropping bottle or disposable pipette, drop 2-3 drops of the phenolphthalein indicator solution on the sample.
- 5.4. Wait 2-3 seconds. If cement is present, the treated material will turn fuchsia.
- 5.5. If this color change does not occur, the material will be considered something other than cement. No further testing will be performed. If the color change does occur, the cement will be tested in the normal manner.

6. REPORT

- 6.1. Report presence of contamination on Lab Form CEM 606 or CEM 607.