Australian Standard®

Methods for sampling and testing aggregates

Method 70: Lime or cement content of uncured stabilized pavement materials (EDTA method)

1 SCOPE This Standard sets out the method for determining the lime or cement content of pavement materials mixed with lime or cement which are sampled from a project under construction and tested within a limited period after the completion of mixing.

The method applies to crushed rock materials. (See Note.)

NOTE: Inaccurate results may be obtained with calcareous materials, e.g. concrete. This may be checked by examining the response of the unstabilized materials to the test procedure.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

1141	Methods for sampling and testing aggregates	
1141.1	Method 1:	Definitions
1141.2	Method 2:	Basic testing equipment
1141.3.1	Method 3.1	Sampling of aggregates
1152	Specification for test sieves	

3 PRINCIPLE Given the design water and design lime or cement contents of the pavement material to be tested, make up test portions with 75, 100 and 125 percent of the design lime or cement contents. Use these test portions to create a calibration curve for reading the lime or cement content of the test portion sampled from the field. Testing must be performed soon after mixing.

Each sample is weighed, sieved and weighed again, then divided into 300 g portions. Addition of ammonium chloride solution, mixing and allowing the mixture to stand is followed by drawing off 10 mL of liquid. This is added to 100 mL of water, the pH is adjusted and the resulting solution is titrated with EDTA solution.

4 DEFINITIONS For the purpose of this Standard the definitions in AS 1141.1 apply.

5 APPARATUS The following apparatus, complying with the relevant provisions of AS 1141.2, is required:

(a) *Balances*—that are—

(i) of sufficient capacity with a limit of performance not exceeding ±0.05 g; and

(ii) of sufficient capacity with a limit of performance not exceeding ±5 g.