Australian Standard®

Methods of testing soils for engineering purposes

Method 4.1.1: Soil chemical tests—Determination of the organic matter content of a soil—Normal method

1 SCOPE This Standard covers the determination of the percentage by mass of organic matter present in a soil (see Note 1).

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

AS
1152 Specification for test sieves

1289 Methods of testing soils for engineering purposes
1289.0 Part 0: General requirements and list of methods
1289.1 Method 1: Preparation of disturbed soil samples for testing

3 APPARATUS The following apparatus is required:

(a) A drying oven complying with the requirements of AS 1289.0.

(b) A balance of at least 100 g capacity with a limit of performance not greater than ±0.005 g.

(c) Two 1-L volumetric flasks.

(d) Two 25 mL burettes, graduated to 0.1 mL.

(e) A 10 mL pipette and a 1 mL pipette fitted with a rubber teat.

(f) Two conical flasks of 500 mL capacity.

(g) Two graduated measuring cylinders, 200 mL and 20 mL.

(h) A desiccator (a convenient size is from about 200 mm to 250 mm diameter) containing anhydrous silica gel.

(i) A glass bottle for mass determinations, approximately 25 mm diameter and 50 mm high, fitted with a ground-glass stopper.

(j) Sieves of 9.5 mm and 425 μm sizes and receivers complying with AS 1152.

(k) Sample dividers of the multiple-slot type (riffle boxes) similar to those shown in AS 1289.1, having openings 7 mm and 13 mm wide.

(l) A suitable mechanical or hand-operated pulverizer.

(m) A wash-bottle, preferably plastic, containing distilled water.