

Australian Standard[®]

Methods of testing soils for engineering purposes

Method 3.8.2: Soil classification tests— Dispersion—Determination of the percent dispersion of a soil

1 SCOPE

This Standard sets out a method for the determination of the percent dispersion of a soil at the 0.005 mm particle dimension.

The method is used in conjunction with AS 1289.3.6.3. It is therefore necessary in addition to this test, to perform a normal hydrometer fine analysis as described in AS 1289.3.6.3.

NOTE: This method may also be known as the SCS test (U.S. Soil Conservation Service) or double hydrometer test.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

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| 1152 | Specification for test sieves |
| 1289 | Methods of testing soils for engineering purposes |
| 1289.0 | Method 0: General requirements and list of methods |
| 1289.2.1.1 | Method 2.1.1: Soil moisture content tests—Determination of the moisture content of a soil—Oven drying method (standard method) |
| 1289.3.6.3 | Method 3.6.3: Soil classification tests—Determination of the particle size distribution of a soil—Standard method of fine analysis using a hydrometer |

3 APPARATUS

The following apparatus shall be used:

- A hydrometer as specified in AS 1289.3.6.3.
- Two hydrometer cylinders, 1 L capacity parallel-sided glass measuring cylinders, about 60 mm internal diameter and 450 mm high marked at 1 L volume, and fitted with rubber stoppers.
- A thermometer to cover the range of 0°C to 50°C, graduated to 0.5°C with an uncertainty not exceeding 0.5°C.
- Sieve, 2.36 mm aperture complying with AS 1152.
- A balance with a limit of performance not exceeding ± 0.05 g.
- A stopclock or stopwatch graduated in seconds.
- An oven as specified in AS 1289.0.