

Australian Standard™

AS 2891.7.3—2005

Methods of sampling and testing asphalt

Method 7.3: Determination of maximum density of asphalt—Methylated spirits displacement

1 SCOPE

This Standard sets out the method for determining the maximum density of asphalt. It measures the density of the voidless asphalt by displacement of methylated spirits.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 1141 Methods for sampling and testing aggregates
- 1141.2 Method 2: Basic testing equipment
- 2891 Methods of sampling and testing asphalt
- 2891.1 Method 1: Sampling of asphalt

3 SAFETY PRECAUTIONS

As methylated spirits is an inflammable liquid care shall be taken to ensure that the test is performed well away from a naked flame or sparking electrical equipment. Safety glasses and gloves shall be worn.

4 DEFINITION

For the purpose of this Standard the definitions given in AS 2891.1 shall apply.

5 MATERIALS

The following materials are required:

- (a) *Methylated spirits* Commercial grade.
- (b) *Paper towels*.

6 APPARATUS

The following apparatus is required:

- (a) *Flask* Flat-bottomed and fitted with a flat metal cover plate with a capillary tube extending down into the flask for removing excess fluid to a constant depth by suction. The capacity of the flask shall be as follows:
 - (i) 1 L for asphalt of 20 mm nominal size or less.
 - (ii) 2 L for asphalt greater than 20 mm nominal size.
- (b) *Pycnometer* Calibrated measuring flask of 1 L capacity.
- (c) *Suction pump* Of low pressure such as a water-operated device.