

# Australian Standard™

## Methods of sampling and testing asphalt

### Method 8: Voids and density relationships for compacted asphalt mixes

AS 2891.8—2005

#### 1 SCOPE

This Standard sets out the method for determining the following voids and density relationships in compacted asphalt mixes:

- (a) Percentage air voids from separately determined values of bulk density and maximum density.
- (b) Absorbed binder, effective binder, maximum theoretical density, voids in the mineral aggregate, and voids filled with binder where the proportions of component materials are known.

#### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

##### AS

- |          |  |
|----------|--|
| 1141     | Methods for sampling and testing aggregate   |
| 1141.5   | Method 5: Bulk density and water absorption of fine aggregate                                  |
| 1141.6.1 | Method 6.1: Particle density and water absorption of coarse aggregate—Weighing-in-water method |
| 1141.6.2 | Method 6.2: Particle density and water absorption of coarse aggregate—Pycnometer method        |
| 1141.7   | Method 7: Apparent particle density of filler  |
| 2341     | Methods of testing bitumen and related roadmaking products                                     |
| 2341.6   | Method 6: Determination of density using a hydrometer  |
| 2341.7   | Method 7: Determination of density using a density bottle                                      |
| 2891     | Methods of sampling and testing asphalt  |
| 2891.1   | Method 1: Sampling of asphalt  |
| 2891.3.1 | Method 3.1: Bitumen content and aggregate grading—Reflux method                                |
| 2891.3.2 | Method 3.2: Bitumen content and aggregate grading—Centrifugal extraction method                |
| 2891.3.3 | Method 3.3: Bitumen content and aggregate grading—Pressure filter method                       |
| 2891.7.1 | Method 7.1: Determination of maximum density of asphalt—Water displacement method              |
| 2891.7.2 | Method 7.2: Determination of maximum density of asphalt—Methylated spirits displacement method |
| 2891.7.3 | Method 7.3: Determination of maximum density of asphalt—Methylated spirits displacement method |
| 2891.9.1 | Method 9.1: Determination of bulk density of compacted asphalt—Waxing procedure                |
| 2891.9.2 | Method 9.2: Determination of bulk density of compacted asphalt—Presaturation method            |
| 2891.9.3 | Method 9.3: Determination of bulk density of compacted asphalt—Mensuration method              |