

## AAPA 2019/20 National Proficiency Testing Round

### Instruction sheet for test stream 1: Asphalt tests

#### Description:

Samples of loose mix will be distributed to registered laboratories for the asphalt testing test stream of the AAPA 2019/20 Proficiency Testing Round.

Participants are encouraged to complete the following tests on the loose mix sample provided:

- Bitumen content and grading AS/NZS 2891.3.1, or AS/NZS 2891.3.3
- Max density AS/NZS 2891.7.1
- Marshall compaction AS/NZS 2891.5
- Marshall stability and flow AS/NZS 2891.5
- Gyratory compaction AS/NZS 2891.2.2
- Bulk density (Presaturation) AS/NZS 2891.9.2

Where the laboratory does not hold NATA accreditation for the standard test methods indicated above, results for an equivalent local test method may be reported, but please note that the proficiency z-score analysis will not be valid for such results.

To report the results, access the webform by clicking:

<http://www.123formbuilder.com/form-5224011/s1-asphalt-tests>

Please note that you will need the **Laboratory ID Code**, which has been sent to you via e-mail to complete the webform.

**Submit results by 30 June 2020.**

#### Procedure:

Loose mix samples will be sent to laboratories in containers. Each container has a unique sample number.

The loose mix is a sample of AC14 with C320 binder.

#### *Sample preparation:*

- Samples to be prepared in accordance with AS2891.1.1.

#### *Reheating:*

- Preheat the compaction mould in the oven
- Compaction Temperature – 150+/- 3deg
- Place approx. Sample Mass – 1200 – 1250g in the mould
- Place in the oven for 1hr +/- 5 min (Ensure the oven temperature allows temperature to be within range) and then compact samples

#### *Test plan and approximate material quantities:*

1. Binder content & grading: **single** test (approx. 1250g)
2. Maximum Density – **duplicate** test (approx. 1000g) report both results
3. Compacted Density
  - a. Marshall **50 blow** compactive effort– compact **2** briquettes (2 x approx. 1250g) and report bulk density of each. Clearly mark briquettes as sample number #1 & #2

- b. Gyrotory **80 cycles, 100 mm diameter** mould – compact **2** briquettes (2 x approx. 1250g) and report bulk density of each
4. Marshall Stability & Flow. Report results for Marshall briquettes #1 and #2

**Reporting:**

Use the webform to report:

- Binder content
- Aggregate grading
- Maximum density
- Compacted bulk density of each specimen
- Height of compacted specimens
- Stability and flow results