

STANHOPE-SETA

CERTIFICATE OF MEASUREMENT

Particle Diameter	$\geq 4 \mu\text{m}_{(c)}$	$\geq 6 \mu\text{m}_{(c)}$	$\geq 14 \mu\text{m}_{(c)}$
ISO CODES (ISO 4406:1999)	20	18	14
Particle counts	5337	2037	136
IP 565 tolerance	2500 to 20000	640 to 5000	40 to 320
Advisory tolerance guide	4636 to 6038	1551 to 2523	58 to 215

General

This material has been produced in accordance with ISO 11171:1999 and ISO Guide 35:1989, and is certified in accordance with the essential requirements of ISO Guide 31:2000(E). The certified values have been derived and evaluated statistically under ISO 9001 conditions on a significant number of tests and AvCount instruments calibrated in accordance with ISO 11171:1999.

The AVCM is certified for use as a verification material for the Seta Analytics SA1000-0 AvCount Instrument, in accordance with the Energy Institute test method IP 565.

The AVCM material, with traceability to NIST, uses suspensions of the same medium test dust ISO MTD (ISO 12103-3/ NIST RM 8631) as mandated by ISO 11171:1999 for calibration of particle counters.

The homogeneity and variability of the AVCM was checked in accordance with ISO Guide 35:1989 and ISO 11171:1999, the calculated coefficient of variation conforms to Table 8 of ISO 11171:1999

Instructions for Use

Suitable for equipment verification, evaluation and staff training.

The ACVM must be conditioned prior to test as below and in accordance with the associated method of test (IP 565).

- 1 Vigorously shake by hand for approximately 60 seconds.
- 2 Ultrasonically disperse contents of bottle for 60 seconds using a bath with a power rating of 3 kW/m².
- 3 Follow the instructions in IP 565 to mechanically tumble the ACVM for a minimum of 1 min.
- 4 Ultrasonically degas the contents of the bottle for 10 seconds using a bath with a power rating of 3 kW/m².

CAUTIONS:

- 1 If the suspension is not used immediately after tumbling, large particles will settle to the bottom of the bottle and be omitted from the measured particle population.
- 2 Opening or using the ACVM in a dusty atmosphere can increase the particle counts.
- 3 Once the container is opened it shall be used immediately and only once.
- 4 Do not expose the ACVM to temperatures in excess of 80 °C.

Verification Procedure

Follow the instructions in the method of test (IP 565) and the AvCount manual.

- 1 The allowable tolerance specified in IP 565 is +/-1 ISO Code.
- 2 As a tolerance of 1 ISO Code can be very large, it is advised that, based on ISO 4259, a difference of greater than 0.7 X Reproducibility (see advisory tolerance guide) plus the uncertainty, can indicate that the ACVM has not been conditioned correctly.
- 3 Results just outside the advisory tolerance guide do not indicate a fault. These results should be logged for trend analysis purposes.

Uncertainty

It may be assumed with 95% confidence that the certified value is within 0.26(R) of the true value for each size channel, where R is the reproducibility of the IP 565 test method

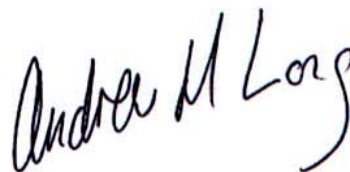
Safety Precautions and Storage Requirements

It is the responsibility of the user of this verification material to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. Supplied packed in accordance with IATA regulations for international transportation. The material should be stored in a cool place away from direct sunlight.

Batch No: AVV2
Expiry Date: 21 November 2010

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