

SA1001-0 Seta AvCount Calibration Material “A”

CERTIFICATE OF ANALYSIS & CONFORMANCE

Batch No: 2307017001
Bottle Number: See Bottle Label
Expiry Date: See Bottle Label
Mean Particle Distribution (Particles/ml)

4 $\mu\text{m}_{(c)}$	6 $\mu\text{m}_{(c)}$	14 $\mu\text{m}_{(c)}$	21 $\mu\text{m}_{(c)}$	25 $\mu\text{m}_{(c)}$	30 $\mu\text{m}_{(c)}$
6072	2373	181	50	26	17

Applicability

SA1001-0 is certified for use as a calibration material for the Seta Analytics AvCount series of instruments for secondary sizing calibration in accordance with ISO 11171.

Description

This material is a secondary working standard with a particle distribution traceable to NIST SRM 2806a (legacy certification) and manufactured in accordance with ISO 11171 - Annex F.

This material is a polydisperse suspension of irregular shaped particles (natural mineral dust) in a mineral hydraulic oil.

Uncertainty

Expanded Uncertainty for the particle content of this standard @4 $\mu\text{m}_{(c)}$: 0.31%

The reported expanded uncertainty is based on a combined standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Test Uncertainty Ratio (TUR)

TUR for the particle content of this standard @4 $\mu\text{m}_{(c)}$: >19.08:1

The reported TUR = $2 \cdot (R/\sqrt{2} + \text{expanded uncertainty}) / 2 \cdot \text{expanded uncertainty}$, where R is the reproducibility of test method IP 565.

Quality Assurance

The test dust is NIST RM 8631a

The hydraulic oil conforms to specification Mil-PRF-5606.

All balances and other measuring instruments used in the manufacture of this secondary working standard are certified to be within current calibration traceable to National Standards.

This material is certified in accordance with the essential requirements of ISO Guide 17034.

The homogeneity and variability of this material was checked in accordance with ISO Guide 35 and ISO 11171.

APPROVED SIGNATORY:

