

# CERTIFICATE OF CALIBRATION

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Order # **333343 X** Calibrated **27 April 1999**  
Item **Density Column Floats**

The floats were calibrated by immersing them in liquid at **23 ± 0.005°C**, and adjusting the density of the liquid until the floats were at neutral buoyancy.

Liquid density was determined at **23 ± 0.010°C** using equipment traceable to National Standards.

Float serial number	Identification	Density kgm <sup>-3</sup>	Mass mg
567	Black digits	896.1	96.33
262	Blue digits	900.0	86.45
185	Green digits	903.9	94.03
304	Purple digits	908.1	76.97
246	Red digits	912.0	80.34
145	Orange digits	916.1	92.11
34	Black digits	919.9	87.24
399	Green digits	924.0	83.87
266	Blue digits	928.1	98.25

Uncertainty of the quoted density **± 0.15 kgm<sup>-3</sup>**

Uncertainty of the quoted mass **± 0.05 mg**

Since the spheres are not manufactured from homogeneous material, and slight damage would therefore cause a change in sphere density, the mass of each sphere has been quoted.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , providing a level of confidence of about 95%. The evaluation of the uncertainty has been carried out in accordance with UKAS requirements.

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