Supplement to Certificate, Issue No. 95117A_10						
CERTIFICATE OF CALIBRATION						
Issue:- Certificate Number:	95117A					
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Approved Signatory:	Mark Norfolk					
Page 1 of 2 Signed:	Mar	0352				
Submitter:-			Issued by:-			
Mecmesin Limited			Kent Scientific Services			
Newton House			8 Abbey Wood Road			
Slinfold			West Malling			
West Sussex			Kent			
RH13 0SZ			ME19 4YT			
			Tel: 03000 415 100 Fax: 01732 220006			
			Fax. 01752 220000			
EQUIPMENT:	Weights					
SERIAL NUMBER:	AH2					
MAKE/TYPE:	N/A					
STANDARDS USED:	Set 12412					
DATE RECEIVED:	25 June 2021					
DATE CALIBRATED:	29 June 2021					
	2, 0000 2021					

## **MEASUREMENTS:**

Kent Scientific Services method used: CAL-M2, Calibration of Small Masses.

The calibrations took place in a controlled environment with the temperature held between 18°C and 22°C, and with the relative humidity held between 40% and 60%.

The measurement results obtained in the table, where each measured value given represents not the true mass, but the mass of a hypothetical weight of density  $8,000 \text{ kg.m}^{-3}$ , which in air of density  $1.2 \text{ kg.m}^{-3}$  would balance the corresponding weight identified in the first column at  $20^{\circ}$ C.

The method of weighing was by substitution (Borda's method). In each instance the standard weight used had been calibrated by UKAS Calibration Laboratory number 0474 or 0352 within the previous three years.

The uncertainty of measurements for each of the different denominations is listed in the last column of the table Duplicate weights, where present, are indicated by a dot or dots.

Customer supplied information is notated with a  $\sim$ , and results relate only to the item(s) calibrated. Unless otherwise notated, samples are tested in as received condition at Kent Scientific Services.

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Certificate No.: 95117A Page 2 of 2

## TABLE OF MEASUREMENT RESULTS

Nominal	Measured	Error from	Estimated
Mass	Value	Nominal	Uncertainty
100 g 100 g 50 g 20 g 20 g 10 g 2 g 2 g 1 g	100.003 9 g 100.003 6 g 49.999 91 g 19.998 93 g 19.999 54 g 9.999 35 g 5.000 71 g 2.000 26 g 2.000 07 g 1.000 11 g	+ 3.9 mg + 3.6 mg - 0.09 mg - 1.07 mg - 0.46 mg - 0.65 mg + 0.71 mg + 0.26 mg + 0.07 mg + 0.11 mg	± 1.0 mg ± 1.0 mg ± 0.60 mg ± 0.50 mg ± 0.50 mg ± 0.40 mg ± 0.30 mg ± 0.24 mg ± 0.24 mg ± 0.20 mg

END OF RESULTS

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