

CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

Alpha-Liberty Company, Inc. 7185 Liberty Centre Drive, Suite E West Chester, OH 45069

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2005

while demonstrating technical competence in the fields of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations and/or tests to which this accreditation applies.

<u>AC-1127</u> Certificate Number



Certificate Valid: 08/01/2017-09/27/2019 Version No. 007 Issued: 08/01/2017



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Alpha-Liberty Company, Inc.

7185 Liberty Centre Drive, Suite E West Chester, Ohio 45069 Bernd Rau 513-777-1525

CALIBRATION

Valid to: September 27, 2019

Certificate Number: AC-1127

ľ,

Mass			
Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Mass Artifacts	1 mg to 5 g (2 to 5) g	0.002 4 mg 0.004 3 mg	Class 0 Weights, Microbalance 0.000 000 1 g
	(5 to 10) g (10 to 50) g (50 to 200) g	0.008 mg 0.022 mg 0.04 mg	Class 0 Weights, Semi-Micro Balance 0.000 001 g
	(200 to 500) g (500 to 1 000) g	0.165 mg 0.233 mg	Class 0 Weights, Analytical Balance 0.0001 g
	(1 000 to 2 000) g (2 000 to 5 000) g (5 000 to 10 000) g	1.51 mg 1.85 mg 2.56 mg	Class 0 Weights, Precision Balance 0.001 g
Mass Artifacts ²	Up to 20 000 g (20 000 to 50 000) g (50 000 to 60 000) g	17.5 mg 29.4 mg 47.8 mg	Class 1 Weights, High Capacity Balance 0.01 g
Balances	Up to 2 g (2 to 5) g (5 to 50) g	0.007 1 mg 0.013 mg 0.067 mg	Class 1 Weights
	Up to 200 g	0.113 mg	Class 1 Weights
	Up to 1 000 g	0.7 mg	Class 1 Weights
	Up to 10 000 g	16.1 mg	Class 1 Weights
	Up to 60 000 g	188 mg	Class 1 Weights





Mass

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Scales	Up to 200 kg	4.8 g	Class 4 Weights
	Up to 30 lb	1.7 g	Class F Weights
	Up to 500 lb	27.9 g	Class F Weights
Balances Minimum Sample Quantity	Up to 60 kg	0.1 % of reading	ASTM Class 1 Weights

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (*k*=2), corresponding to a confidence level of approximately 95%.

Notes:

- 1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement
- uncertainties are expected on-site than what is reported on the accredited scope.
- 2. Weights in this range can be calibrated to ASTM Class 2.
- 3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1127.





www.anab.org