

**Calibrate, Inc.**

610 Jones Ferry Rd. Suite 210  
 Carrboro, NC 27510  
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**Calibration Certificate**  
**SOP 125-3**

**INSTRUMENT INFORMATION**

SERIAL #	A12345B
SIZE (UL)	200
MANUFACTURER	Rainin LTS
LOCATION	Company name
DEPARTMENT	R&D
CONTACT	Smith, J.
RESTRICTION	GLP
CALIBRATION DATE	01-Nov-2010
CALIBRATED BY	PS
CALIBRATION DUE	01-Nov-2011

**ENVIRONMENTAL CONDITIONS**

TEMPERATURE IN C	21.11
RELATIVE HUMIDITY IN %	55.50
BAROMETRIC P. IN mmHg	762.00
AIR DENSITY	0.001203036
Z FACTOR	1.002982872

**MEASUREMENT & TEST EQUIP. INFO**

THERMO-HYGROMETER SERIAL #	90917310
CALIBRATION DUE	30-Nov-2010
BALANCE ID	METTLER
BALANCE MODEL	AG245
BALANCE SERIAL #	1117023184
CALIBRATION DUE	28-Feb-2011
WEIGHT SET SERIAL #	1MN2
CALIBRATION DUE	31-Aug-2012

**PARTS REPLACED**

SEAL	YES	Y
O RING	N/A	N
PISTON	N/A	N
SHAFT	N/A	N
TENSION RING	N/A	N
REPAIR	N/A	N
CALIBRATION ONLY	N/A	N
PREVENTIVE MAINT.	YES	Y

<b>INSTRUMENT STATUS</b>	<b>PASS</b>
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**TOLERANCE LIMITS**

VOLUME ul	INACCURACY %	+/- ml	FROM (ml)	TO (ml)	IMPRECISION %
50	3	0.00150	0.04850	0.05150	3
150	3	0.00450	0.14550	0.15450	3
200	3	0.00600	0.19400	0.20600	3

calSierra v1.9.8

**CALIBRATION DATA**

SAMPLE	WEIGHT(g)	VOLUME(ml)	WEIGHT(g)	VOLUME(ml)	WEIGHT(g)	VOLUME(ml)
1	0.05020	0.05035	0.15020	0.15065	0.20010	0.20070
2	0.05050	0.05065	0.14970	0.15015	0.20040	0.20100
3	0.05010	0.05025	0.15040	0.15085	0.19950	0.20010
4	0.05000	0.05015	0.14980	0.15025	0.20010	0.20070
5	0.05030	0.05045	0.15020	0.15065	0.20040	0.20100

**STATISTICAL ANALYSIS**

MEAN VOLUME(ml)	0.05037
SD	0.00019
INACCURACY	0.73960
IMPRECISION	0.38302

0.15051
0.00030
0.33841
0.19769

0.20070
0.00037
0.34844
0.18362

**STATUS**

ACCURACY	PASS
PRECISION	PASS

PASS
PASS

PASS
PASS

**NOTE:**

Technician \_\_\_\_\_

Approved By \_\_\_\_\_ Date: 01-Nov-2010

This calibration was conducted using standards traceable to SI through N.I.S.T. This document may not be reproduced except in full.