



Accreditation No.: 69071  
to ISO/IEC 17025:2005

## LIQUID IN GLASS THERMOMETER CALIBRATION REPORT

Customer Lab Depot

### INSTRUMENT INFORMATION

Calibration Date: 07/16/2015      Calibration Due Date: 07/16/2016  
 Serial No.: 6489      Report No.: D5021  
 Model No.: ASTM S 63F      Immersion: Total  
 Range: 18/89      Divisions: 0.2° Scale: °F

Standard Temperature	Temperature Reading	Correction +/-	Tolerance Pass / Fail	Uncertainty
32.000	32.100	-0.100	Pass	± 0.110

\*If the sign given is + the true temperature is higher than the indicated temperature,  
 If the sign given is - the true temperature is lower than the indicated temperature.

**Test Reference Documents:**

- For A Discussion Of Accuracies Attainable With Thermometers Such As This Instrument See:
- ASTM E1-07, Standard Specification for ASTM Thermometers.
- ASTM E77-07, Standard Test Method For Inspection And Verification Of Thermometers.
- NIST 250-23, Liquid in Glass Thermometer Calibration.
- NIST 1088, Special Publication : Maintenance, Validation, and Recalibration of Liquid-in-Glass Thermometers
- NIST IR 5341, Assessment of Uncertainties of Liquid-in-Glass Thermometer Calibrations at the National Institute of Standards and Technology
- NIST Technical Note 1265, Guidelines for Realizing the International Temperature Scale of 1990 (ITS-90).

**NIST Traceable Equipment Used to Perform Testing:**

Manufacture	Description	Model Number	Serial Numbers	Calibration Date	Calibration Due Date
Fluke /Hart Scientific	Black Stack PRT Scanner Module	2562	A56655	10/10/2014	10/10/2015
Burns	100ohm PRT Probe's	5626-15	3543	10/10/2014	10/10/2015
"	"	"	1086	10/10/2014	10/10/2015
"	"	"	1095	10/10/2014	10/10/2015
"	"	"	856968	10/10/2014	10/10/2015
"	"	"	853277	10/10/2014	10/10/2015

**Laboratory Environmental Conditions:**

**Temperature**      **Humidity**      **Onsite Calibration**  
 23°C +/- 5°C      40% - 60%      Yes

**Thermometer Integrity:**

Complete visual inspection for any physical damage.

**Calibration Procedure Used:**

The NIST traceable calibration instruments listed were used to calibrate the described thermometer listed above against the NIST traceable reference standards in accordance with ISO/IEC 17025 calibration procedures at the noted test temperatures by a comparison method. The standards used have been certified by an ISO/IEC 17025/A2LA accredited calibration laboratory.

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable to NIST and through NIST to the International System of Units (SI). The uncertainty of measurement associated with the measurement result reported in this certificate is available from Thermco Products Inc. upon request and was accounted for in making the decision of compliance or noncompliance with the relevant specification identified above.

The reported expanded uncertainty of measurement is stated as the combined standard uncertainty of measurement multiplied by the coverage factor k (k =2) such that the coverage probability corresponds to approximately 95 %.

**CALIBRATION TECHNICIAN :** John Williams

**CALIBRATION APPROVED BY:** Rick Casario

This certificate may not be reproduced without the express written approval of THERMCO PRODUCTS, INC.

[www.ThermcoProducts.com](http://www.ThermcoProducts.com)  
 10 Millpond Drive Unit #10 Lafayette, NJ 07848 - Phone: 973.300.9100