

Survey of the Thermal Analysis Community's DSC-Related Reference Material Needs

To evaluate and focus NIST's DSC-related reference material program efforts, we invite you to provide feedback regarding your experience with and requirements for DSC calibration materials. Your participation would be greatly appreciated. This brief survey should take 5 minutes to complete. Please return completed survey to tara.fortin@nist.gov.

1. Respondent Information (Please fill in unless you prefer to remain anonymous):

First Name:	
Surname:	
Organization/Company:	
Address:	
Address (continued):	
City:	
State/Province:	
Postal Code:	
Country:	
Email:	

2. Do you utilize a DSC in your work? Yes No

3. Do you use reference materials for instrument calibration? Yes No

If yes, please list materials utilized:

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If no, please skip to question 6.

4. Have you purchased reference materials from NIST? Yes No

5. Please specify the primary motivation(s) for your choice of reference material supplier:

- Material selection/availability
- Reliability of certification values
- Price
- Other

If other, please specify:

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NIST is investigating the potential for a non-toxic, low-temperature calibration material to replace the discontinued SRM 2225 Mercury.

6. Would a low-temperature (approx. -64 °C) reference material be useful? Yes No

NIST currently offers Standard Reference Materials (SRMs) and Reference Materials (RMs). SRM documentation provides “certified” values that have been determined via a primary method (or via multiple independent methods) and typically have very low assigned uncertainties. RM documentation provides “reference” values that have been determined via single, non-primary, test method (or via an interlaboratory study or some other collaboration with outside laboratories) and typically have higher assigned uncertainties.

7. Would an RM be sufficient to meet your calibration material needs? Yes No

If no, please explain:

8. In general, what level of uncertainty is acceptable for a reference material intended for temperature calibration?

- ≤ 1.0 °C
- ≤ 0.5 °C
- ≤ 0.1 °C
- Other

If other, please specify:

9. In general, what level of uncertainty is acceptable for a reference material intended for enthalpy calibration?

- ≤ 2 %
- ≤ 1 %
- ≤ 0.5 %
- Other

If other, please specify:

10. Are there any reference materials that you would find particularly useful but are currently unavailable from any supplier?

11. Other comments?

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