DIN EN ISO 11357-4:2021-05 (E)

Plastics - Differential scanning calorimetry (DSC) - Part 4: Determination of specific heat capacity (ISO 11357-4:2021)

Contents

Page

European foreword ... **3**

Foreword ... **4**

1 Scope ... **5**

2 Normative references ... **5**

3 Terms and definitions ... **5**

4 Principle ... **6**
4.1 General ... 6
4.2 Continuous-scanning method ... 7
4.3 Stepwise-scanning method ... 8

5 Apparatus ... **8**

6 Test specimen ... **8**

7 Test conditions and specimen conditioning ... **9**

8 Procedure ... **9**
8.1 Selection of crucibles ... 9
8.2 Setting up the apparatus and adjustment of isothermal baselines ... 9
8.3 Measurement of specific heat capacity of calibration material ... 10
8.4 Specimen run ... 12

9 Determination of specific heat capacities ... **12**
9.1 Calculation of specific heat capacities ... 12
9.2 Numerical rounding of the results ... 12

10 Precision and bias ... **12**

11 Test report ... **13**

Annex A (informative) **Approximate expression of the specific heat capacity of pure α-alumina [3][4]** ... **14**

Bibliography ... **16**