

# ISO 11357-7:2022-03 (E)

## Plastics - Differential scanning calorimetry (DSC) - Part 7: Determination of crystallization kinetics

---

<b>Contents</b>		<b>Page</b>
<b>Foreword</b> .....		<b>iv</b>
<b>1 Scope</b> .....		<b>1</b>
<b>2 Normative references</b> .....		<b>1</b>
<b>3 Terms and definitions</b> .....		<b>1</b>
<b>4 Principle</b> .....		<b>2</b>
<b>5 Apparatus and materials</b> .....		<b>2</b>
<b>6 Test specimens</b> .....		<b>2</b>
<b>7 Test conditions and specimen conditioning</b> .....		<b>2</b>
<b>8 Calibration</b> .....		<b>2</b>
8.1 Calibration in heating mode.....		<b>2</b>
8.2 Symmetry of temperature scale.....		<b>2</b>
<b>9 Procedure</b> .....		<b>2</b>
9.1 General.....		<b>2</b>
9.2 Loading the test specimen into the crucible.....		<b>3</b>
9.3 Insertion of the crucibles into the instrument.....		<b>3</b>
9.4 Melting of the polymer.....		<b>3</b>
9.5 Isothermal crystallization.....		<b>3</b>
9.6 Non-isothermal crystallization.....		<b>5</b>
<b>10 Expression of results</b> .....		<b>5</b>
10.1 General.....		<b>5</b>
10.2 Methods of determination of crystallization kinetics.....		<b>5</b>
10.2.1 Isothermal crystallization.....		<b>5</b>
10.2.2 Non-isothermal crystallization.....		<b>7</b>
<b>11 Precision</b> .....		<b>8</b>
<b>12 Test report</b> .....		<b>8</b>
<b>Annex A (informative) Formulae for crystallization kinetics of polymers</b> .....		<b>9</b>
<b>Bibliography</b> .....		<b>11</b>