

ISO 6721-5:2019 (E)

Plastics — Determination of dynamic mechanical properties — Part 5: Flexural vibration — Non-resonance method

Contents

	Foreword
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Apparatus
5.1	Loading assembly
5.1.1	General
5.1.2	Load stage
5.1.3	Transducers
5.2	Electronic data-processing equipment
5.3	Temperature measurement and control
5.4	Devices for measuring test specimen dimensions
6	Test specimens
6.1	General
6.2	Shape and dimensions
6.3	Preparation
7	Number of specimens
8	Conditioning
9	Procedure
9.1	Test atmosphere
9.2	Measuring the cross-section of the specimen
9.3	Clamping the specimen
9.4	Varying the temperature
9.5	Performing the test
10	Expression of results
10.1	Symbols
10.2	Calculation of flexural storage modulus E_f'
10.2.1	General
10.2.2	Avoidance of specimen resonance
10.2.3	Correction for transducer resonance
10.2.4	Correction for apparatus compliance
10.2.5	Application of a length correction
10.3	Calculation of the flexural loss factor $\tan \delta E_f$
10.4	Calculation of the flexural loss modulus E_f''
10.5	Presentation of data as a function of temperature
11	Precision
12	Test report