

# ISO 4664-3:2021 (E)

## Rubber, vulcanized or thermoplastic — Determination of dynamic properties — Part 3: Glass transition temperature (T<sub>g</sub>)

---

### Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Apparatus
5.1	General
5.2	Force capability and measurement
5.3	Cycling capability
5.4	Damping measuring device
5.5	Test chamber
5.6	Grips
5.7	Measurement of test piece dimensions
6	Test piece
6.1	Preparation
6.2	Dimensions
7	Number of test pieces
8	Conditioning
9	Procedure
9.1	Measurement of the test piece dimensions
9.2	Measurement of properties
9.3	Test conditions
9.3.1	Strain
9.3.2	Frequency
9.3.3	Temperature
9.4	Clamping and testing
10	Expression of results
10.1	General
10.2	Calculation of $\tan \delta$
11	Determination of glass transition temperature, T <sub>g</sub>
12	Precision
13	Test report
Annex A	(informative) Temperature dependence of dynamic properties of vulcanized rubber
Annex B	(informative) Precision results from an interlaboratory test programme
B.1	General
B.2	Precision results from the ITP
B.2.1	Programme details
B.2.2	Precision results