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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 46469-2025

**Leather - Physical and mechanical tests - Determination of
tensile strength and percentage elongation**

皮革 物理和机械试验 抗张强度和伸长率的测定

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is modified to adopt ISO 3376:2020 "Leather - Physical and mechanical tests - Determination of tensile strength and elongation".

Compared with ISO 3376:2020, this document has undergone many structural adjustments. A comparison table of the structural numbering changes between the two documents can be found here.

Appendix A.

This document differs significantly from ISO 3376:2020 in several technical aspects. A single vertical line is drawn in the margin outside the relevant clauses.

(I) are marked. A summary of these technical differences and their causes can be found in Appendix B.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Leather Industry (SAC/TC252).

1 Scope

This document describes the test methods for tensile strength, elongation at specified load, elongation at maximum force, and elongation at break of leather.

This document applies to the determination of tensile strength and elongation of various types of leather.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 39364 Sampling sites for testing the chemical, physical, mechanical and color fastness of leather (GB/T 39364-2020, ISO 2418.

2017, MOD)

GB/T 45705 Physical and mechanical tests of leather - Determination of thickness (GB/T 45705-2025, ISO 2589:2016, MOD) QB/T 2707 Preparation and conditioning of test specimens for physical and mechanical testing of leather

3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

4 Principles

The degree of stress and extension of a specimen when it is stretched at a certain rate to a predetermined force value or until the specimen breaks.

5 Instruments and Equipment

5.1

The tensile testing machine shall meet the following conditions.

---The tensile test range is adapted to the specimen.

---Equipped with a tensile force recording device, with an accuracy class of 1.0.

---The driving device causes the clamp to move at a constant speed of (100 ± 20) mm/min.

---A device for recording force-distance curves.

---The clamp, with a length of not less than 45mm in the direction of the applied load, can be clamped mechanically or pneumatically. The clamp should have internal [features/equipment].

Texture ensures that the sample does not slip as visible to the naked eye during the test.

5.2

Elongation measuring device, which measures the elongation by monitoring the separation of the clamps or by monitoring the distance between two fixed points on the sample through a sensor.

5.3

Thickness gauge, conforming to GB/T 45705.

5.4

The die cutter shall conform to the requirements of QB/T 2707 and be able to cut specimens that conform to the shape shown in Figure 1 and the dimensions specified in Table 1.