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**Rubber bands — General  
requirements and test methods**

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# Contents

	Page
<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 Classification</b> .....	<b>2</b>
<b>5 Requirements</b> .....	<b>2</b>
5.1 General.....	2
5.2 Dimensions.....	2
5.3 Physical properties.....	3
<b>6 Test methods</b> .....	<b>3</b>
6.1 General.....	3
6.2 Dimensions.....	3
6.3 Tensile properties.....	4
6.3.1 Test method A: Tube sample.....	4
6.3.2 Test method B: Ring sample.....	5
6.4 Tension set.....	6
6.5 Density.....	7
6.6 Accelerated-ageing test.....	7
<b>7 Packaging</b> .....	<b>7</b>
<b>8 Marking</b> .....	<b>7</b>

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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# Rubber bands — General requirements and test methods

## 1 Scope

This document specifies general requirements and relevant test methods for rubber bands made of dry natural rubber used for general purposes such as for daily wrapping or packaging.

This document is not applicable for cover rubber bands made of blend and synthetic rubbers. This document is not applicable for rubber bands used for engineering applications, for food contact, nor for medical uses.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 2781, *Rubber, vulcanized or thermoplastic — Determination of density*

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### **rubber band**

elastic circular band used for holding things together

### 3.2

#### **lay flat length**

half of the inner circumference of the *rubber band* (3.1)

Note 1 to entry: See [Figure 1](#).

### 3.3

#### **cut-width**

distance between the two cut surfaces of the *rubber band* (3.1)

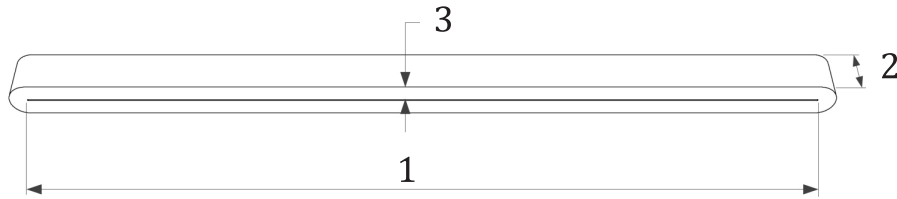
Note 1 to entry: See [Figure 1](#).

### 3.4

#### **thickness**

half the difference between the inside diameter and outside diameter of the *rubber band* (3.1)

Note 1 to entry: See [Figure 1](#).



- Key**
- 1 lay flat length
  - 2 cut-width
  - 3 thickness

**Figure 1 — Lay flat length, cut-width and thickness of a rubber band**

## 4 Classification

Rubber bands are classified into three types:

- Type 1, bands with low modulus;
- Type 2, bands with moderate to high modulus;
- Type 3, bands without modulus requirement.

## 5 Requirements

### 5.1 General

Rubber bands shall have a uniform finish and free from discoloration, thin spots, air bubbles, embedded particles, tackiness, and other blemishes likely to affect its serviceability (through a visual inspection).

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### 5.2 Dimensions

The dimensions (lay flat length, cut-width and thickness) of rubber bands shall be, unless agreed between the manufacturer and the buyer otherwise, designated as marking. The tolerances on dimensions are given in [Table 1](#).

**Table 1 — Tolerances for dimensions of rubber bands**

Dimensions	Tolerance
Lay flat length	
— less than 25 mm	±8,0 %
— between 25 mm and 100 mm	±5,0 %
— above 100 mm	±3,2 %
Thickness	
— less than 1 mm	±0,2 mm
— between 1 mm and 1,6 mm	±0,3 mm
— above 1,6 mm	±15 %
Cut-width	
— less than 3 mm	±10 %
— between 3 mm and 12 mm	±9 %
— above 12 mm	±7 %