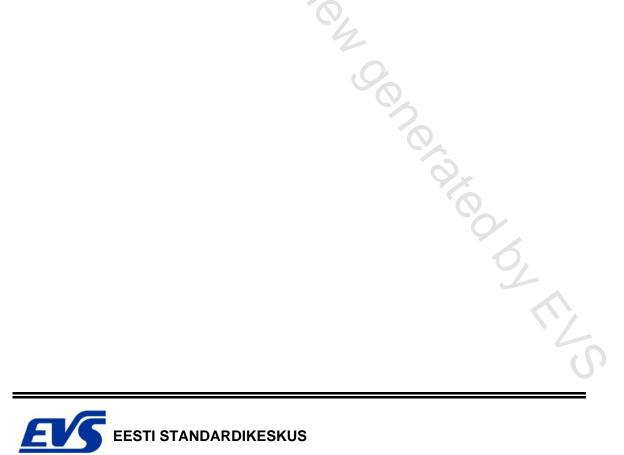
# **Dentistry - Wires for use in orthodontics**

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Dentistry - Wires for use in orthodontics



# EESTI STANDARDI EESSÕNA NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 15841:2006 sisaldab Euroopa standardi EN ISO 15841:2006 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 15841:2006 consists of the English text of the European standard EN ISO 15841:2006.	
Käesolev dokument on jõustatud	This document is endorsed on 24.11.2006	
24.11.2006 ja selle kohta on avaldatud	with the notification being published in the	
teade Eesti standardiorganisatsiooni ametlikus väljaandes.	official publication of the Estonian national standardisation organisation.	
ametiikus valjaanues.	standardisation organisation.	
Standard on kättesaadav Eesti	The standard is available from Estonian	
standardiorganisatsioonist.	standardisation organisation.	
Käsitlusala:	Scope:	
This International Standard specifies	This International Standard specifies	
requirements and test methods for wires	requirements and test methods for wires	
to be used in fixed and removable	to be used in fixed and removable	
orthodontic appliances. It includes	orthodontic appliances. It includes	
preformed orthodontic archwires but	preformed orthodontic archwires but	
excludes springs and other preformed	excludes springs and other preformed	
components. This International Standard	components. This International Standard	
gives detailed requirements concerning	gives detailed requirements concerning	
the presentation of the physical and	the presentation of the physical and	
mechanical properties of orthodontic wires, the test methods by which they can	mechanical properties of orthodontic wires, the test methods by which they can	
be determined, packaging, and labelling	be determined, packaging, and labelling	
information. Specified qualitative and	information. Specified qualitative and	
quantitative requirements for freedom	quantitative requirements for freedom	
from biological hazard are not included in	from biological hazard are not included in	
this International Standard but it is	this International Standard but it is	
recommended that to assess possible	recommended that to assess possible	
biological or toxicological hazards,	biological or toxicological hazards,	
reference should be made to ISO 7405	reference should be made to ISO 7405	
and ISO 10993-1.	and ISO 10993-1.	

**ICS** 11.060.10

Võtmesõnad:

00 17 5

# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

# **EN ISO 15841**

October 2006

ICS 11.060.10

**English Version** 

# Dentistry - Wires for use in orthodontics (ISO 15841:2006)

Art dentaire - Fils pour utilisation en orthodontie (ISO 15841:2006)

Zahnheilkunde - Drähte für die Kieferorthopädie (ISO 15841:2006)

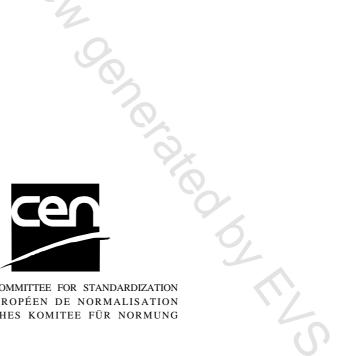
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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN ISO 15841:2006: E

#### Foreword

This document (EN ISO 15841:2006) has been prepared by Technical Committee ISO/TC 106 "Dentistry" in collaboration with Technical Committee CEN/TC 55 "Dentistry", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2007, and conflicting national standards shall be withdrawn at the latest by April 2007.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

# Endorsement notice

The text of ISO 15841:2006 has been approved by CEN as EN ISO 15841:2006 without any modifications.

# **INTERNATIONAL STANDARD**

First edition 2006-10-01

# **Dentistry — Wires for use in orthodontics**



Reference number ISO 15841:2006(E)

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# Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 15841 was prepared by Technical Committee ISO/TC 106, Dentistry, Subcommittee SC 1, Filling and restorative materials.

## Introduction

supplies. This first edition of ISO 15841 has been developed as a result of the difficulty often encountered by clinicians in making meaningful comparisons between wires using the information currently available from manufacturers and suppliers.

# **Dentistry — Wires for use in orthodontics**

### 1 Scope

This International Standard specifies requirements and test methods for wires to be used in fixed and removable orthodontic appliances. It includes preformed orthodontic archwires but excludes springs and other preformed components.

This International Standard gives detailed requirements concerning the presentation of the physical and mechanical properties of orthodontic wires, the test methods by which they can be determined, packaging, and labelling information.

Specified qualitative and quantitative requirements for freedom from biological hazard are not included in this International Standard but it is recommended that to assess possible biological or toxicological hazards, reference should be made to ISO 7405 and ISO 10993-1.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 1942, Dentistry — Vocabulary

ISO 6892, Metallic materials — Tensile testing at ambient temperature

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1942 and the following apply.

#### 3.1

#### austenite-finish temperature

 $T_{af}$ 

temperature at which the metallurgical transformation from the low-temperature martensite phase to the high-temperature austenite phase is completed

#### 3.2

#### bending stiffness

 $S_{\mathsf{b}}$ 

increment of load to produce a unit increment of deflection in the proportional region, expressed in N/mm (e.g. used in the bend test)

#### 3.3

#### descriptor

code to identify the nominal cross-sectional dimension(s) of a wire in thousandths of an inch without unit designation, in accordance with accepted orthodontic practice (e.g., 16, 18,  $17 \times 25$ ,  $21 \times 21$ )