

STN	Stomatológia Lejacie vosky a vosky na bazálne platne (ISO 15854: 2023)	STN EN ISO 15854 85 6320
------------	---	--

Dentistry - Casting and baseplate waxes (ISO 15854:2023)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/23

Obsahuje: EN ISO 15854:2023, ISO 15854:2023

Oznámením tejto normy sa ruší
STN EN ISO 15854 (85 6320) z júna 2021

137328

EUROPEAN STANDARD

EN ISO 15854

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2023

ICS 11.060.10

Supersedes EN ISO 15854:2021

English Version

Dentistry - Casting and baseplate waxes (ISO 15854:2023)Médecine bucco-dentaire - Cires pour coulée et pour
plaque de base (ISO 15854:2023)Zahnheilkunde - Guss- und Basisplattenwachse (ISO
15854:2023)

This European Standard was approved by CEN on 23 July 2022.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

EN ISO 15854:2023 (E)

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 15854:2023) 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 December 2023, and conflicting national standards shall be withdrawn at the latest by December 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 15854:2021.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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

Endorsement notice

The text of ISO 15854:2023 has been approved by CEN as EN ISO 15854:2023 without any modification.

INTERNATIONAL STANDARD

ISO 15854

Third edition
2023-01

Dentistry — Casting and baseplate waxes

Médecine bucco-dentaire — Cires pour coulée et pour plaque de base



Reference number
ISO 15854:2023(E)

© ISO 2023

ISO 15854:2023(E)**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2023

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword.....	v
Introduction.....	vi
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Classification.....	2
5 Requirements.....	2
5.1 Appearance.....	2
5.2 Flow.....	2
5.3 Behaviour on trimming.....	3
5.4 Behaviour on softening — Type 1.....	3
5.5 Appearance after flaming.....	3
5.6 Behaviour on softening — Type 2.....	3
5.7 Residue on artificial teeth — Type 2.....	3
5.8 Behaviour of colouring material — Type 2.....	3
5.9 Adhesion on storage — Type 2.....	3
5.10 Residue on ignition — Type 1.....	3
5.11 Biocompatibility.....	3
6 Sampling.....	4
7 Test methods — General.....	4
7.1 Ambient temperature.....	4
7.2 Apparatus function verification.....	4
8 Test methods — Specific.....	4
8.1 Visual inspection.....	4
8.2 Flow.....	4
8.2.1 Principle.....	4
8.2.2 Apparatus.....	4
8.2.3 Preparation of test pieces.....	8
8.2.4 Procedure.....	9
8.2.5 Expression of results and evaluation.....	10
8.3 Behaviour on trimming test.....	11
8.3.1 Principle.....	11
8.3.2 Apparatus.....	11
8.3.3 Procedure.....	11
8.4 Behaviour on softening test — Type 1.....	11
8.4.1 Principle.....	11
8.4.2 Apparatus.....	11
8.4.3 Procedure.....	11
8.5 Appearance after flaming test.....	12
8.5.1 Principle.....	12
8.5.2 Procedure.....	12
8.6 Behaviour on softening test — Type 2.....	12
8.6.1 Principle.....	12
8.6.2 Apparatus.....	12
8.6.3 Procedure.....	12
8.7 Residue on artificial teeth and behaviour of wax colouring material test — Type 2.....	12
8.7.1 Principle.....	12
8.7.2 Apparatus.....	13
8.7.3 Procedure.....	13
8.8 Adhesion on storage test — Type 2.....	14
8.8.1 Principle.....	14

ISO 15854:2023(E)

8.8.2	Apparatus	14
8.8.3	Procedure	14
8.9	Residue on ignition test— Type 1	15
8.9.1	Principle	15
8.9.2	Apparatus	15
8.9.3	Procedure	15
9	Marking and packaging	16
9.1	Marking	16
9.2	Packaging	16
10	Test report	16
Annex A (informative) Determination of the melting point of wax		18
Bibliography		20

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).

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).

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.

This document was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 2, *Prosthetic materials*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 55, *Dentistry*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 15854:2021), which has been technically revised.

The main changes compared with the previous edition are as follows:

- the scope has been clarified;
- waxes supplied for use in CAD/CAM procedures have been included;
- the appearance after flaming has been extended to include casting waxes.

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.

ISO 15854:2023(E)

Introduction

For the purposes of this document, the term ‘casting’ includes ‘pressing’, as used for glass ceramics.

It is recommended that, in assessing possible biological or toxicological hazards, reference be made to ISO 7405 and ISO 10993-1.

Dentistry — Casting and baseplate waxes

1 Scope

This document specifies the classification of and requirements for waxes used for dental casting (including products intended for CAD/CAM milling) using the lost-wax technique and dental baseplate preparation together with the test methods to be employed to determine compliance with these requirements.

Solid polymer products (such as acrylics) for CAD/CAM work, and thermoplastic or photo-curing resins used in additive processes, are not covered by this document.

This document does not include specific and quantitative requirements for freedom from biological hazards.

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 1942, *Dentistry — Vocabulary*

ISO 21920-2, *Geometrical product specifications (GPS) — Surface texture: Profile — Part 2: Terms, definitions and surface texture parameters*

ISO 6873, *Dentistry — Gypsum products*

ISO 8601-1, *Date and time — Representations for information interchange — Part 1: Basic rules*

ISO 22112, *Dentistry — Artificial teeth for dental prostheses*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN