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Dentistry - Classification of tooth restorations preparation (ISO 24395:2023)

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. 11/23

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EUROPEAN STANDARD

**EN ISO 24395**

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

**Dentistry - Classification of tooth restorations preparation  
(ISO 24395:2023)**

Médecine bucco-dentaire - Classification de la  
préparation des restaurations dentaires (ISO  
24395:2023)

Zahnheilkunde - Einteilung von  
Zahnrestaurationspräparationen (ISO 24395:2023)

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**EN ISO 24395:2023 (E)**

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## **European foreword**

This document (EN ISO 24395:2023) 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of an identical text or by endorsement, at the latest by February 2024, and conflicting national standards shall be withdrawn at the latest by February 2024.

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## **Endorsement notice**

The text of ISO 24395:2023 has been approved by CEN as EN ISO 24395:2023 without any modification.

# INTERNATIONAL STANDARD

# ISO 24395

First edition  
2023-08

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## Dentistry — Classification of tooth restorations preparation

*Médecine bucco-dentaire — Classification de la préparation des  
restaurations dentaires*



Reference number  
ISO 24395:2023(E)

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## ISO 24395:2023(E)

### Foreword

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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 document 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)).

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This document was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 3, *Terminology*, 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).

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## **Introduction**

A classification of the location and depth of preparations made prior to the placement of tooth restorations supports the development of a consistent basis for the comparison of restorative materials and of decision support tools for the selection of restorative materials.

The traditional classification of carious lesions based on tooth type and lesion site was proposed by GV Black when restorative materials were limited to materials such as amalgam and gold.

While there is a widely recognized classification of cavities, that of GV Black, that classification dates back to a time when metallic materials were the only restorative options available. While attempts have been made to apply that classification to restoration, currently, there is no agreement on a classification of tooth preparations made for the placement of restorations.

Newer adhesive restorative materials and contemporary operative instrumentation better preserve sound tooth structure and offer new treatment possibilities concerning the restoration's location and depth. Standardizing the terminology used to describe these two parameters will provide a consistent basis for considering modern restorative materials' clinical use.

That development has been widely discussed in dental sciences. Various articles have been published on that topic without bringing up a standardized solution for a classification of lesions in relation to restorative needs and usage of materials. The correct diagnosis of hard tissue defects in human teeth plays an essential role in preserving remaining natural tooth structure and in optimising the longevity of the restoration.

The standardization of the terminology used to describe these two variables, depth and location, will provide a consistent basis for considering modern restorative materials' clinical use. This internationally accepted classification of restoration used to treat hard tissue defects in teeth may be used to specify restorative materials' intended use when documented in product instructions.

# Dentistry — Classification of tooth restorations preparation

## 1 Scope

This document establishes a system for classifying the location and depth of human tooth restorations preparations.

## 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 3950, *Dentistry — Designation system for teeth and areas of the oral cavity*

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