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**Kozmetika - Analizne metode - Določevanje živega srebra v sledovih v kozmetičnih izdelkih z atomsko absorpcijsko spektrometrijo (AAS) s tehniko hladnih par po razklopu pod tlakom (ISO 23821:2022)**

Cosmetics - Analytical methods - Determination of traces of mercury in cosmetics by atomic absorption spectrometry (AAS) cold vapour technology after pressure digestion (ISO 23821:2022)

Kosmetische Mittel - Untersuchungsverfahren - Bestimmung von Quecksilberspuren in kosmetischen Mitteln durch Kaltdampf-Atomabsorptionsspektrometrie (AAS) nach Druckaufschluss (ISO 23821:2022)

Cosmétiques - Méthodes d'analyse - Dosage des traces de mercure dans les cosmétiques par la technique de spectrométrie d'absorption atomique (SAA) de vapeur froide après digestion sous pression (ISO 23821:2022)

**Ta slovenski standard je istoveten z: EN ISO 23821:2022**

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**Cosmetics - Analytical methods - Determination of traces  
of mercury in cosmetics by atomic absorption  
spectrometry (AAS) cold vapour technology after pressure  
digestion (ISO 23821:2022)**

Cosmétiques - Méthodes d'analyse - Dosage des traces  
de mercure dans les cosmétiques par la technique de  
spectrométrie d'absorption atomique (SAA) de vapeur  
froide après digestion sous pression (ISO 23821:2022)

Kosmetische Mittel - Untersuchungsverfahren -  
Bestimmung von Quecksilberspuren in kosmetischen  
Mitteln durch Atomabsorptionsspektrometrie (AAS)  
Kaldampftechnologie nach Druckaufschluss (ISO  
23821:2022)

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

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## European foreword

This document (EN ISO 23821:2022) has been prepared by Technical Committee ISO/TC 217 "Cosmetics" in collaboration with Technical Committee CEN/TC 392 "Cosmetics" the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by March 2023, and conflicting national standards shall be withdrawn at the latest by March 2023.

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**Cosmetics — Analytical methods —  
Determination of traces of mercury  
in cosmetics by atomic absorption  
spectrometry (AAS) cold vapour  
technology after pressure digestion**

*Cosmétiques — Méthodes d'analyse — Dosage des traces de mercure  
dans les cosmétiques par la technique de spectrométrie d'absorption  
atomique (SAA) de vapeur froide après digestion sous pression*

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## ISO 23821:2022(E)

### 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)).

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This document was prepared by Technical Committee ISO/TC 217, *Cosmetics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 392, *Cosmetics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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).

## Introduction

This document has been developed in parallel with ISO 23674. Knowing this, an interlaboratory test using either one or the other method was performed on same tailor-made cosmetic products in order to establish that both methods fulfilled the same requirements (see [Annex B](#)). This method was validated by means of an interlaboratory test according to ISO 5725-2<sup>[Z]</sup> using lipstick, body lotion, toothpaste and eyeshadow, with a mercury concentration in the range of 0,110 mg/kg to 5,84 mg/kg. Statistical characteristics regarding this interlaboratory test are provided in [Annex A](#), [Table A.1](#).

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