SLOVENSKI STANDARD
SIST EN ISO 9978:2023

01-marec-2023

Zaščita pred sevanjem - Zaprti viri - Metode preskušanja prepuščanja (ISO 9978:2020)

Radiation protection - Sealed sources - Leakage test methods (ISO 9978:2020)

Strahlenschutz - Umschlossene radioaktive Stoffe - Dichtheitsprüfungen (ISO 9978:2020)

Radioprotection - Sources scellées - Méthodes d’essai d’étanchéité (ISO 9978:2020)

Ta slovenski standard je istoveten z: **EN ISO 9978:2022**

ICS:

13.280	Varstvo pred sevanjem	Radiation protection

SIST EN ISO 9978:2023 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 9978

December 2022

ICS 13.280

English Version

Radiation protection - Sealed sources - Leakage test methods (ISO 9978:2020)

Radioprotection - Sources scellées - Méthodes d'essai d'étanchéité (ISO 9978:2020)

Strahlenschutz - Umschlossene radioaktive Stoffe - Dichtheitsprüfungen (ISO 9978:2020)

This European Standard was approved by CEN on 18 December 2022.

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

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European foreword

The text of ISO 9978:2020 has been prepared by Technical Committee ISO/TC 85 "Nuclear energy, nuclear technologies, and radiological protection" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 9978:2022 by Technical Committee CEN/TC 430 "Nuclear energy, nuclear technologies, and radiological protection" 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of an identical text or by endorsement, at the latest by June 2023, and conflicting national standards shall be withdrawn at the latest by June 2023.

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Endorsement notice

The text of ISO 9978:2020 has been approved by CEN as EN ISO 9978:2022 without any modification.

INTERNATIONAL STANDARD

ISO 9978

Second edition
2020-07

Radiation protection — Sealed sources — Leakage test methods

Radioprotection — Sources scellées — Méthodes d'essai d'étanchéité

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Foreword

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This document was prepared by Technical Committee ISO/TC 85, *Nuclear energy, nuclear technologies, and radiological protection*, Subcommittee SC 2, *Radiological protection*.

This second edition cancels and replaces the first edition (ISO 9978:1992), which has been technically revised. The main changes compared to the previous edition are as follows:

— Clause 4: Revised to add text specifying factors to be considered in designing an effective leak testing regime for a particular type of sealed source;

— Clause 4: Requirement added that personnel performing leak tests be appropriately trained and qualified, informative reference to ISO 9712 added;

— Clause 4: Requirement added that measurement uncertainty shall be considered in sentencing non-binary test results;

— Table 1 — "Threshold detection values and limiting values for different test methods" has been revised for clarity;

— 5.1: Informative reference to suitable assay techniques for immersion test liquid samples added: ISO 19361 and ISO 19581;

— 5.1.1, 5.1.2, 5.1.4: Composition of suitable immersion test liquids clarified;

— 5.3: Informative reference to suitable wipe testing techniques (ISO 7503-2) added and clarification that acceptance criteria is absolute without correction for wiping efficiency required;

— 6.1: Normative reference to ISO 20485 added for methods of helium leak testing and calculation of acceptance limits;

— 6.2: Cautionary text added to state that efficacy of tests assume ideal conditions for vision of bubbles;

— 6.2.1: Cautionary text added regarding bubble testing of self-heated sources;

— A.1: Text expanded to clarify which tests to use under given circumstances.