
Merjenje radioaktivnosti - Radionuklidi, ki oddajajo gama žarke in beta delce - Preskusna metoda za oceno enostavnosti dekontaminacije površinskih materialov (ISO 8690:2024)

Measurement of radioactivity - Gamma ray and beta emitting radionuclides - Test method to assess the ease of decontamination of surface materials (ISO 8690:2024)

Messung der Radioaktivität - Gamma- und Beta-Strahlung emittierende Radionuklide - Prüfverfahren zur Bewertung der Dekontaminierbarkeit von Werkstoffoberflächen (ISO 8690:2024)

Mesurage de la radioactivité - Radionucléides émetteurs gamma et bêta - Méthode d'essai pour évaluer l'aptitude à la décontamination des matériaux de surface (ISO 8690:2024)

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EUROPEAN STANDARD
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EUROPÄISCHE NORM

EN ISO 8690

August 2026

ICS 13.280

English Version

Measurement of radioactivity - Gamma ray and beta
emitting radionuclides - Test method to assess the ease of
decontamination of surface materials (ISO 8690:2024)

Mesurage de la radioactivité - Radionucléides
émetteurs gamma et bêta - Méthode d'essai pour
évaluer l'aptitude à la décontamination des matériaux
de surface (ISO 8690:2024)

Messung der Radioaktivität - Gamma- und Beta-
Strahlung emittierende Radionuklide - Prüfverfahren
zur Bewertung der Dekontaminierbarkeit von
Werkstoffoberflächen (ISO 8690:2024)

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Ref. No. EN ISO 8690:2026 E

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European foreword

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**International
Standard**

ISO 8690

**Measurement of radioactivity —
Gamma ray and beta emitting
radionuclides — Test method to
assess the ease of decontamination
of surface materials**

*Mesurage de la radioactivité — Radionucléides émetteurs
gamma et bêta — Méthode d'essai pour évaluer l'aptitude à la
décontamination des matériaux de surface*

**Third edition
2024-09**

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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

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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 third edition cancels and replaces the second edition (ISO 8690:2020), of which it constitutes a minor revision.

The main changes are as follows:

- symbols were corrected and clarified;
- principles were rephrased and optimized;
- [Table 1](#) was optimized;
- figures were completed and corrected;
- editorial corrections were made.

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ISO 8690:2024(en)**Introduction**

Wherever radioactivity is used, there is a risk that surfaces can become contaminated through contact with radioactivity in solution or airborne radioactivity. It is normally necessary to remove this surface contamination to reduce the risk to staff from accidental ingestion of the radioactivity on the surface. The ease of decontaminating surface materials is therefore an important parameter to consider when selecting materials to use, e.g. for facilities in the nuclear industry, in radionuclide laboratories or nuclear medicine facilities.

This document defines a quantitative method under objective conditions for testing the ease of decontamination of surface materials. The method enables the comparison of different surface materials to support decisions on materials to use for different applications.

For the test, radioactive solutions are deposited onto a sample of the material being studied. The solutions contain radionuclides commonly found in the nuclear industry (^{60}Co , ^{137}Cs or ^{134}Cs) and are in aqueous form. The surface is then cleaned and the residual activity on the surface is measured to give a quantitative measure of the ease of decontamination.

The results of the tests on different materials therefore help the user select the best surface material for the application being considered.

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