



EA MLA Signatory Český institut pro akreditaci, o.p.s. Olšanská 54/3, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products, as amended

CERTIFICATE OF ACCREDITATION

No. 247/2024

Státní ústav radiační ochrany, v.v.i. with registered office Bartoškova 1450/28, 140 00 Praha 4, Company Registration No. 86652052

> for the Testing Laboratory No. **1479** SÚRO Testing Laboratories

> > Scope of accreditation:

Determination of the content of radionuclides in gaseous, liquid and solid samples, human body; determination of dosimetric quantities and radon activity for the purposes of radiation protection to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of Accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the Conformity Assessment Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited Conformity Assessment Body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 676/2021 of 20. 12. 2021, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: 29. 5. 2029

Prague: 29. 5. 2024





Jan Velíšek
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Státní ústav radiační ochrany, v.v.i.

CAB number 1479, SÚRO Testing Laboratories Bartoškova 1450/28, 140 00 Praha 4

Testing laboratory locations:

1. Branch Hradec Králov	é	Piletická 57/15A, 500 03 Hradec Králové
2. Monitoring Departmen	t	Bartoškova 1450/28, 140 00 Praha 4
3. Branch Ostrava		Syllabova 1198/21, 703 00 Ostrava
4. Medical Exposure Depart	artment	Bartoškova 1450/28, 140 00 Praha 4
5. Dosimetry Department		Bartoškova 1450/28, 140 00 Praha 4
6. Natural Radiation Sour	ces Department	Bartoškova 1450/28, 140 00 Praha 4

The laboratory provides opinions and interpretations of the test results.

Detailed information on activities within the scope of accreditation (tested subject) is given in the section "Specification of the scope of accreditation".

1. Branch Hradec Králové

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of radionuclides by high resolution gamma-ray spectrometry	SZP 11 (ČSN EN ISO 10703)	Gaseous, liquid, solid samples	
2	Determination of gross alpha activity concentration in water by measurement of evaporation residue and scintillator ZnS(Ag) mixture	SZP 2 (ČSN 75 7611)	Water	-
3	Determination of gross beta activity concentration in water by beta particles measurement in ignited evaporation residue by a window proportional counter	SZP 3 (ČSN 75 7612)	Water	-
4	Determination of ²²² Rn activity concentration in water by measurement of gamma rays	SZP 4 (ČSN 75 7624)	Water	-

asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)	
2, 3, 4	Water: drinking, bottled, natural, infant, mineral, surface, ground, mine, waste, rain, utility, raw, sea, sewage, process	

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

the laboratory does not apply a flexible approach to the scope of accreditation

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Státní ústav radiační ochrany, v.v.i.

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2. Monitoring Department

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of radionuclides by high resolution gamma-ray spectrometry	SZP 11 (ČSN EN ISO 10703)	Gaseous, liquid, solid samples	-
2	Determination of gross alpha activity concentration in water by measurement of evaporation residue and scintillator ZnS(Ag) mixture	SZP 12 (ČSN 75 7611)	Water	-
3	Determination of gross beta activity concentration in water by beta particles measurement in ignited evaporation residue by a window proportional counter	SZP 13 (ČSN 75 7612)	Water	-
4	Determination of ⁹⁰ Sr activity after chemical separation by the proportional beta counting	SZP 14 (VDI 123)	Food chain samples, water, aerosols in filters	-
5	In vivo radiobioassay by gamma- ray spectrometry and determination of committed effective dose by calculation from measured values	SZP CTP 1 (VDI 127; SÚJB Recommendation: Individual monitoring for activities involving exposure to ionizing radiation. Part II Internal exposure)	Human body, internal radiation exposure of persons	-

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the laboratory does not apply a flexible approach to the scope of accreditation

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
2, 3, 4 Water: drinking, bottled, natural, infant, mineral, surface, ground, mine, waste, rain, utilit sea, sewage, process	



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3. Branch Ostrava

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of radionuclides by high resolution gamma-ray spectrometry	SZP 11 (ČSN EN ISO 10703)	Gaseous, liquid, solid samples	-
2	Determination of ⁹⁰ Sr activity after chemical separation by the proportional beta counting	SZP 35 (VDI 123)	Food chain samples, water	-

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Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested subject)
2	Water: drinking, bottled, natural, infant, mineral, surface, ground, mine, waste, rain, utility, raw, sea, sewage, process

4. Medical Exposure Department

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1 .	Determination of patient dose and image quality by thermoluminescence dosimeters and x-ray films (postal TLD dental inspection)	SOP 1	Dental intraoral x-ray equipment	.=
2	Determination of attenuation properties of materials by iontometric method in Isovolt Titan x-ray beams	SOP 09 (ČSN EN 61331-1)	Protective devices against diagnostic medical X-radiation	-
3	Determination of air kerma and air kerma rate by iontometric method in Isovolt Titan x-ray beams and in OG-8 gamma ray beams	SOP 10 (IAEA TRS No. 457; IAEA TRS No. 469)	Ionizing radiation fields (photons only)	-

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

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5. Dosimetry Department

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of personal doses from external exposure using TLD Harshaw 6600 system	M1	External radiation exposure of persons	-
2	Determination of H*(10) and H'(0.07) using TLD Harshaw 6600 system	M2	Ionizing radiation field	-

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6. Natural Radiation Sources Department

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1*	Determination of radon activity concentration using continuous monitor based on detection of alpha radiation	M12 (SÚJB Recommendation: Measurement and evaluation of exposure from natural radiation sources in buildings with habitable or living rooms; SÚJB Recommendation: Determination of personal doses to workers in workplaces with material containing elevated levels of natural radionuclides; SÚJB Recommendation: Determination of personal doses to workers in workplaces with possible elevated exposure from radon)	Indoor air of buildings, NORM and radon workplaces	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
2*	Determination of the time average radon activity concentration by electret dosimetry system RM1	M13 (SÚJB Recommendation: Measurement and evaluation of exposure from natural radiation sources in buildings with habitable or living rooms; SÚJB Recommendation: Determination of personal doses to workers in workplaces with material containing elevated levels of natural radionuclides; SÚJB Recommendation: Determination of personal doses to workers in workplaces with possible elevated exposure from radon)	Indoor air of buildings, NORM and radon workplaces	-

asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

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Abbreviations

Abbieviatio	
CTP	Whole-Body Counter
H*(10)	Ambient dose equivalent at a depth of 10 mm
H'(0.07)	Directional dose equivalent at a depth of 0.07 mm
IAEA	International Atomic Energy Agency
M	Method
NORM	Naturally occurred radioactive materials
SOP	Standard Operating Procedure
SÚJB -	State Office for Nuclear Safety
SZP	Standard Operating Procedure
TLD	Thermoluminescence dosimetry
TRS	Technical Reports Series
VDI	State Office for Nuclear Safety Guideline

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

[&]quot;This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself."