



## SCS Directory

Accreditation number: SCS 0075

International standard: ISO/IEC 17025:2017  
Swiss standard: SN EN ISO/IEC 17025:2018

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Initial accreditation: 19.03.1997  
Current accreditation: 18.09.2022 to 17.09.2027  
Scope of accreditation see: [www.sas.admin.ch](http://www.sas.admin.ch)  
(Accredited bodies)

### Scope of accreditation as of 18.09.2022

#### Calibration laboratory for measuring instruments used for radiation protection

##### Calibration and Measurement Capability (CMC)

Type of radiation	Source of radiation	Measured quantity	Measuring range	Best Measurement Uncertainty $\pm$ <sup>1)</sup>	Remarks
Photons	Cs-137	Dose equivalent a,b	150 nSv/h ... 1.5 $\mu$ Sv/h > 1.5 $\mu$ Sv/h ... 3 Sv/h	5 % 3 %	8 sources
	Co-60	Dose equivalent a,b	15 $\mu$ Sv/h ... 3 Sv/h	3 %	3 sources
	X-Ray unit	Dose equivalent a,b	50 $\mu$ Sv/h ... 70 mSv/h	3 %	12 keV ... 250 keV
Neutrons	Am-Be	Dose equivalent a	20 $\mu$ Sv/h ... 1.0 mSv/h	7 %	



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<b><math>\alpha</math>-,<math>\beta</math>-,<math>\gamma</math>-,<math>x</math>-emitters</b>	Am-241	Activity	10 Bq ... 400 kBq	7 %	Activity in non-standard geometrie (phantoms)
	I-129				
	Co-60				
	Co-57				
	Cs-137				
	K-40				
	Ba-133				
	Eu-152				
<b><math>\alpha</math>-,<math>\beta</math>-,<math>\gamma</math>-,<math>x</math>-emitters</b>	Am-241	Activity per unit area	0.1 Bq/cm <sup>2</sup> ... 5 kBq/cm <sup>2</sup>	7%	Based on the Swiss standard procedure (PSI Report No 07-01, 2007, ISSN 1019-0643) other nuclides are possible to determine
	C-14				
	Tc-99				
	Cl-36				
	Sr/Y-90				
	Fe-55				
	I-129				
	Co-57				
	Cs-137				
Co-60					
<b><math>\beta</math>- emitters</b>	H-3	Activity per unit volume	0.1 MBq/m <sup>3</sup> ... 100 MBq/m <sup>3</sup>	10 %	

<sup>a</sup>  $H_p(10)$ ,  $H^*(10)$

<sup>b</sup>  $H_p(0.07)$ ,  $H^*(0.07)$

In case of contradictions in the language versions of the directories, the German version shall apply.

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1) The given extended measurement uncertainty is the standard uncertainty of the measurement multiplied by an extension factor  $k = 2$ , which corresponds to a confidence level of about 95% for a normal distribution.