

Key comparison BIPM.RI(II)-K1.Bi-207

MEASURAND : Equivalent activity of ^{207}Bi

x_i : result of measurement carried out in the SIR
for the sample submitted by laboratory i

u_i : combined standard uncertainty of x_i

Lab i	x_i / kBq	u_i / kBq	Date of measurement
LNE-LNHB	10 889	55	2010-03-30

Key comparison BIPM.RI(II)-K1.Bi-207

MEASURAND : Equivalent activity of ²⁰⁷Bi

Key comparison reference value: the SIR reference value for this radionuclide is $x_R = 10\,865$ kBq with a standard uncertainty, $u_R = 48$ kBq (see Section 4.1 of the Final Report).

The value x_i is the equivalent activity for laboratory i .

The degree of equivalence of each laboratory i with respect to the reference value is given by a pair of terms:

$D_i = (x_i - x_R)$ and U_i , its expanded uncertainty ($k = 2$), both expressed in kBq, and

$U_i = 2((1 - 2w_i)u_i^2 + u_R^2)^{1/2}$ when each laboratory has contributed to the calculation of x_R with a weight w_i .

Lab i ↓	D_i	U_i
	/ kBq	
LNE-LNHB	24	87

BIPM.RI(II)-K1.Bi-207

Degrees of equivalence for equivalent activity of ²⁰⁷Bi

D_i and expanded uncertainty U_i ($k = 2$), both expressed in kBq

