



The University
Of
Sheffield.

Safety Services

Measuring Dose Rates with Minis

It is possible to measure low dose-rates with Mini contamination monitors, providing you have the right calibration factor. Unfortunately, this can vary from monitor to monitor even of the same basic type, so the figures given below should only be taken as a rough guide.

All the figures below assume that any betas are shielded, except those marked with an asterisk, where the isotope is assumed to be totally unshielded.

MINI E			
ISOTOPE	cps/ μSvh^{-1}	cps/ $2.5\mu\text{Svh}$	cps/ $7.5\mu\text{Svh}^{-1}$
Na-22	3	7.5	22.5
*Na-22	4	10	30
Na-24	3	7.5	22.5
*Na-24	6	15	45
*P-32	3	7.5	22.5
*Ca-45	1.6	4	12
Cr-51	3	7.5	22.5
Co-57	5	12.5	37.5
Co-60	3	7.5	22.5
Kr-85	3	7.5	22.5
*Sr-90	3.5	9	2.7
1-125	7	17.5	52.5
1-131	3	7.5	22.5
*I-131	4	10	30
Cs-137	3	7.5	22.5
Am-241	15	37.5	112.5

MINI 5.44 A/B			
ISOTOPE	cps/ μSvh^{-1}	cps/ $2.5\mu\text{Svh}$	cps/ $7.5\mu\text{Svh}^{-1}$
Cr-51	210	525	1575
I-125	2900	7250	21750