

Standard Operation Procedure (SOP)

Fe55 radioactive calibration source

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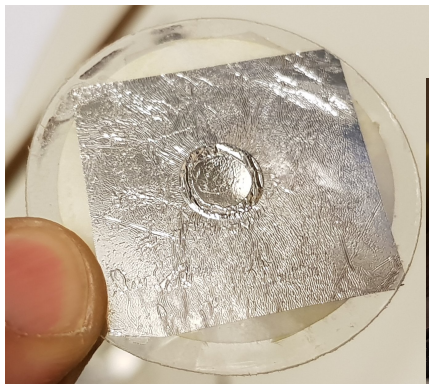
updated December 2018

The division currently owns two Fe55 radioisotopes for calibration purposes. Fe55 calibration sources have a half life time of 2.7 years and their main emission in the form present here is 5900 eV photon emission. Source 1 had 1 MBq in 2006-08-01 and has 42 kBq in December 2018. Source 2 had 3.7 MBq in 2011-03-14 and 504 kBq in December 2018. With this intensity the source is classified as a weak source and is in general safe to use. The source is deposited on a thin aluminium foil stabilized between two layers of plastic. The bottom layer of plastic has an open window in which the aluminium is exposed. During use take care to not touch this fragile aluminium foil.

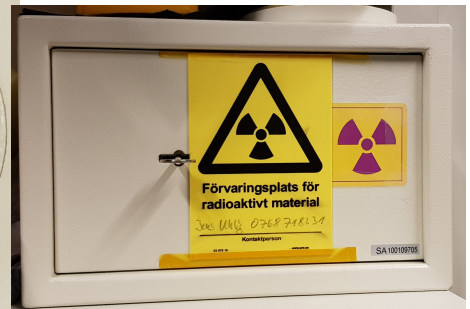
The source should be handled on the plastic only. Please take care when using sticky tape to fix it anywhere that the covering label can be ripped off. Both sources must not be altered/machined from the form they currently have. Both sources have to be returned into the tresor located in the "millenia lab" directly after use.



(a) Fe55 source with label



(b) Backside of Fe55 source. The window with the open thin aluminium foil is clearly visible in the middle of the plastic cover



(c) Tresor in the millenia lab in which the sources are stored.