

## <sup>164</sup>Gd

Greenwood et al. reported the discovery of <sup>164</sup>Gd in the 1988 paper “Identification of a new isotope, <sup>164</sup>Gd” (1988Gr14). <sup>164</sup>Gd was produced in spontaneous fission of <sup>252</sup>Cf and <sup>164</sup>Gd was separated with the Idaho National Engineering Laboratory (INEL) ISOL facility. X-rays and  $\gamma$ -rays were measured with an intrinsic planar Ge and Ge(Li) detector, respectively. “The half-life values in [the table] derived from each of the four measurements, using both mass-164 and mass-180 fractions, form a consistent set and clearly indicate that in each case the decay of the <sup>164</sup>Gd activity was observed. Thus, the adopted value given in [the table] of  $(45 \pm 3)$  s for the half-life of <sup>164</sup>Gd was obtained straightforwardly as a  $1/\sigma^2$  weighted average of the four individually measured half-life values.”

Adapted from reference (2013Ma01)

1988Gr14 R. C. Greenwood, M. A. Lee, and R. A. Anderl, *Radiochim. Acta* **43**, 129 (1988).

2013Ma01 E. May and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 1 (2013).

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