

## <sup>26</sup>Na

In 1958, Nurmia and Fink observed <sup>26</sup>Na for the first time in “Cross-sections for (n,p) and (n,α) reactions of magnesium with 14.8 MeV neutrons; A new isotope Na<sup>26</sup>” (1958Nu41). Neutrons of 14.8 MeV produced at the Arkansas 400 keV Cockroft-Walton accelerator irradiated highly enriched <sup>26</sup>MgO targets. The resulting activities were measured with a plastic scintillator. “In addition to 15.0-hour Na<sup>24</sup>, a composite activity from a mixture of 38-second Ne<sup>23</sup> from the Mg<sup>26</sup>(n,α) reaction and 60-second Na<sup>25</sup> from the Mg<sup>25</sup>(n,p) reaction, and an activity with half-life of 1.04±0.03 s were observed. The last activity, consisting mainly of high energy (>5 MeV) beta-particles, has not been reported previously, and it is assigned to a new isotope of sodium Na<sup>26</sup>.”

Adapted from reference (2012Th10)

1958Nu41 M. J. Nurmia and R. W. Fink, Nucl. Phys. **8**, 139 (1958).

2012Th10 M. Thoennessen, At. Data Nucl. Data Tables **98**, 933 (2012).

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