

Isolation of Palladium-103 from Rhodium Targets

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Abstract—Known and newly developed methods for dissolving Rh metal with the aim to transfer gram amounts of an irradiated rhodium target into solution are discussed and compared. Extraction of microamounts of Pd against the background of macroamounts of Rh with modified sulfur-containing crown ethers and quaternary ammonium salts is studied. Procedures are suggested for isolation of carrier-free ^{103}Pd from rhodium targets irradiated at accelerators.

Keywords: palladium-103, rhodium, isolation from irradiated targets

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