

0.03.

UNITED STATES DEPARTMENT OF COMMERCE  
NATIONAL BUREAU OF STANDARDS  
WASHINGTON 25, D. C.

National Bureau of Standards  
Certificate

*Replaced  
by 949a  
April 6, '67*

Standard Sample 949a

Plutonium Metal

Plutonium, percent ----- 99.91 ± 0.03

Americium, percent ----- 0.06

This plutonium metal standard is issued to provide a chemical standard for plutonium. Each sample consists of two or three pieces of metal sealed in a glass tube under a reduced-pressure argon atmosphere. The sample number and the weight of the sample is given on each tube. An overall accuracy of 0.05 mg is claimed for each sample weight. The atomic weight of the plutonium is 239.11.

The americium resulting from decay of 13 year plutonium 241 is increasing at the rate of approximately 120 ppm per year as of December 10, 1964. The total of other detected impurities is approximately 275 ppm.

These samples were prepared and analyzed by the Los Alamos Scientific Laboratory of the University of California, Los Alamos, New Mexico, in collaboration with the National Bureau of Standards.

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Washington, D. C. 20234  
December 10, 1964