

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

National Bureau of Standards  
Certificate

Beta-Ray Standard

Carbon-14

This standard consists of radioactive carbon-14 in approximately 25 milliliters of carrier solution in a flame-sealed glass ampoule. The carrier solution consists of 10.6 grams per liter of  $\text{Na}_2\text{CO}_3$  in 0.003M NaOH.

The activity of the carbon-14 in disintegrations per second per gram of solution is, as of July, 1958

\* 1250 \*

The solution from which this ampoule was prepared has been standardized by absolute gas counting of carbon dioxide in both the proportional and Geiger regions in the National Bureau of Standards compensated internal gas counters.

The overall accuracy of this standardization is estimated to be  $\pm 1.5\%$ .

For the Director

Radioactivity Section  
Radiation Physics Division

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