Certificate of Analysis

Standard Reference Material 975 Isotopic Standard for Chlorine

Absolute Abundance Ratio, Cl-35/Cl-37 3.127	$2 + 0.0079 \\ - 0.0082$
Chlorine-35, atom percent 75.77	$0 + 0.044 \\ - 0.046$
Chlorine-37, atom percent 24.22	$9 + 0.046 \\ - 0.044$

The preparation furnished is a commercial sample of sodium chloride, formerly distributed as NBS Isotopic Reference Sample No. 105. Measurements are by triple filament mass spectrometry, using mixtures of known composition prepared from high-purity separated isotopes as comparison standards. Overall limits of error are based on 95 percent confidence limits for the mean and on allowances for the effects of known sources of possible systematic error. Details of the applications and measurements are published by W. R. Shields, T. J. Murphy, E. L. Garner, and V. H. Dibeler, JACS 84, 1519-1522 (1962).

W. Wayne Meinke, Chief, Office of Standard Reference Materials.