U.S. Department of Commerce Elliot L. Richardson, Secretary

National Bureau of Standards Ernest Ambler, Acting Director

National Bureau of Standards Certificate of Analysis Standard Reference Material 141c Acetanilide

CH₃CONHC₆H₅

This SRM consists of highly purified acetanilide for use in checking microchemical procedures for the determination of carbon, hydrogen, and nitrogen in organic matter. A total of 48 determinations made on 9 samples from the lot yielded values that check the theoretical composition within the limits of experimental error.

In addition, no significant statistical inhomogeneity between the 9 samples was detected from these measurements. It is recommended that the theoretical percentages by weight be used, namely:

Carbon									71.09
Hydrogen									
Nitrogen									

The overall direction and coordination of the technical measurements leading to certification were performed under the chairmanship of John K. Taylor.

The technical and support aspects concerning the certification and issuance of this Standard Reference Material were coordinated through the Office of Standard Reference Materials by T. W. Mears and R. K. Kirby.

This material was obtained from the J. T. Baker Chemical Company. Measurements made by R. G. Christensen at NBS with differential scanning calorimetry indicate an overall purity of at least 99.99 percent. This material is not hygroscopic under ordinary conditions of storage and can be used without preliminary drying. Microchemical measurements were made at NBS by E. R. Deardorff and at the Butterworth Microanalytical Consultancy, Teddington, Middlesex, U.K.

Washington, D.C. 20234 September 27, 1976 J. Paul Cali, Chief Office of Standard Reference Materials