REPORT ON STANDARD SAMPLES FOR SPECTROCHEMICAL ANALYSIS

1950

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A.S.T.M. COMMITTEE E-2, SUBCOMMITTEE IV
ON
STANDARDS AND PURE MATERIALS
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FOREWORD

Quantitative spectrochemical analysis is based on comparison of unknown samples with standard samples of similar composition. Standard samples are frequently prepared by the analyst for the particular problem in hand, but for the analysis of many common materials, particularly metals and alloys, standard samples have been prepared in quantities adequate for general distribution. The rapid growth of spectrochemical analysis and a corresponding increase in available standard samples call for a periodic compilation of types and sources of standards for the information of analysts.

In 1943 a report on available standard samples was prepared under the sponsorship of the War Metallurgy Committee by W. R. Brode The report was revised by W. R. Brode and B. F. Scribner and published in October, 1944, by the American Society for Testing Materials. Since then Subcommittee IV on Standards and Pure Materials of the A.S.T.M. Committee E-2 on Emission Spectroscopy has undertaken to keep the report up to date. A revision was published in 1947 and now the results of a new survey conducted by the subcommittee, under the chairmanship of Charles H. Corliss, National Bureau of Standards, are published to provide, in a form for ready reference, current information on spectrochemical standard samples. The number of standard samples listed in the series of reports are as follows:

Year	Spectrographic Standards	Chemical Standards	Total
1944	210	103	313
1947	435	113	548
1950	632	120	752

As a result of a survey conducted by Alan Goldblatt of this committee, the section on pure substances has been expanded from a few general references to the listing of 325 entries supplied by 43 sources. The total number of entries of standard samples and pure substances in this report is 1077.

June 30, 1950.

THIS PUBLICATION is one of many issued by the American Society for Testing Materials in connection with its work of promoting knowledge of the properties of materials and developing standard specifications and tests for materials. Over the years the Society has published many technical symposiums, reports, and special books. These may consist of a series of technical papers, reports by the A.S.T.M. technical committees, or compilations of data developed in special Society groups with many organizations co-operating. A list of A.S.T.M. publications and information on the work of the Society will be furnished on request.