U. S. Department of Commerce
Malcolm Baldrige
Secretary

National Bureau of Standards
Ernest Ambler, Director

Certificate of Analysis

Standard Reference Material 1131

SOLDER

(40 Sn-60 Pb)

This SRM is intended primarily for application in optical emission and x-ray spectroscopic methods of analysis.

	Percent
Tin	39.3
Antimony	0.43
Arsenic	.01
Bismuth	.06
Copper	.011
Nickel	.012
Silver	.01

SIZE: Samples are 1 1/4 inch in diameter and 3/4 inch thick.

PREPARATION: The material for this standard was prepared by Alcan Metal Powders, Inc., Elizabeth, New Jersey, as Alloy 40B to specifications for solder contained in ASTM Designation B32. About 1500 lbs. was atomized to powder of minus 200 mesh size. [Note: Some 1000 lbs. was sized between 200 and 325 mesh sieves, blended, analyzed and is issued as SRM 127b primarily for checking chemical methods of analysis.] About 500 lbs. of the prepared powder material was converted to rods for this standard at Nuclear Metals, West Concord, Massachusetts, first by cold compaction at 13 tons psi to billets, then followed by cold extrusion with a liner.

HOMOGENEITY: Extensive testing for Sn and Sb at the Research Laboratories of the General Motors Corporation, Warren, Michigan; and for Sb, As, Bi, Cu, Ni, and Ag at NBS showed the material to be of satisfactory homogeneity.

Washington, D.C. 20234
October 1, 1981
(Revision of Certificate
dated 1/25/68)

George A. Uriano, Chief
Office of Standard Reference Materials