National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material 3186

Spectrometric Standard Solution

Phosphate

Batch Code 393108

This Standard Reference Material (SRM) is intended for use in ion chromatography, or any other analytical technique that requires aqueous standard solutions for calibrating instruments. SRM 3186 is a single component solution prepared gravimetrically to contain 1,000 μg of phosphate per gram of solution. The certified value is based on a gravimetric procedure, i.e., weight per weight composition of the high-purity potassium dihydrogen phosphate salt dissolved in 0.06 μS/cm (18 megohm) water. The uncertainty listed is based on the gravimetric uncertainty of the preparation and the effect of solvent transpiration through the container walls.

Metal	Concentration (μg/g)	Source Purity, %
Phosphate	1,000 $\pm$ 5	SRM 186Id*, (99.947)

*SRM 186Id Potassium Dihydrogen Phosphate

Stability: This certification is valid for one year from the date of shipment from NIST provided the solutions are kept tightly capped and stored under normal laboratory conditions. NIST will monitor the stability of representative solutions from this SRM lot and if changes occur that invalidate this certification, NIST will notify purchasers. The attached registration sheet should be returned immediately upon receipt of this SRM to facilitate notification.

SRM 3186 was prepared gravimetrically by T.A. Butler and analyzed by ion chromatography by K.W. Pratt of the NIST Inorganic Analytical Research Division.

The technical and support aspects involved in the preparation, certification, and issuance of this SRM were coordinated through the Standard Reference Materials Program by J.S. Kane.

Gaithersburg, MD 20899
November 1, 1993
(Revision of certificate dated 10-5-93)

Thomas E. Gills, Acting Chief
Standard Reference Materials Program