

## **Arsenic in silicon - Depth profile**

Art. ID	NIST-2134
Unit	each
Deliverydetails	No Dangerous Good /not restricted

### Description

This Standard Reference Material (SRM®) is intended for use in calibrating secondary ion response to minor and trace levels of arsenic in a silicon matrix by the analytical technique of secondary ion mass spectrometry (SIMS). NIST-2134 is intended for calibrating the response of a SIMS instrument for arsenic in a silicon matrix under a specific set of instrumental conditions. It may also be used by a laboratory as a transfer standard for the calibration of working standards of arsenic in silicon. A unit of NIST-2134 consists of a 1 cm x 1 cm single crystal silicon substrate that has been ion implanted with the isotope <sup>75</sup>As at a nominal energy of 100 keV. NIST-2134 is certified for the retained dose of <sup>75</sup>As atoms. The dose is expressed in units of arsenic mass per unit area. Additional noncertified information about the concentration of arsenic atoms as a function of depth below the surface is provided by SIMS. /// Sample value(s) - please ask for current certificate.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	Retained dose of <sup>75</sup> As		0,09120 ± 0.00035	µg/cm <sup>2</sup>		