

Traceability of Artel PCS[®] Results

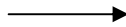
This document outlines the methods by which the results of a pipette calibration using the Artel PCS[®] Pipette Calibration System are traceable to national or international standards. All test and calibration methods are carried out in the Artel Laboratory. The methods below are accredited to ISO 17025 General Requirements for the competence of testing and calibration laboratories. Calibration certificates are also available for the PCS Instrument and the Instrument Calibrator Kit.

PCS Instrument (Calibration method)

The Artel Laboratory performs photometric absorbance calibrations of liquid volume using comparison to gravimetry that are traceable to national standards, using the PCS calibration method 310A4504.



PCS tested using calibration method



Balance with traceable weights



Traceable to national standards

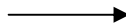
Weights certified

PCS Instrument Calibrator Kit (Calibration method)

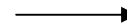
The PCS Instrument Calibrator Kit is calibrated using method 310A2997. Each kit contains four photometric standards that are tested using a reference spectrophotometer that is traceable to international standards using certified reference materials (CRM's). The calibrated values and the individual PCS instrument measured values are compared and must meet manufacturer specifications to obtain a passing result.



PCS Instrument Calibrator Kit



Reference Spectrophotometer with CRM's



Traceable to international standards

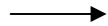
CRM's certified

PCS Standard and Bulk Reagent Kit (Test method)

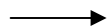
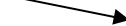
The Artel Laboratory performs photometric absorbance testing of all critical components of the PCS Reagent Kits using methods 310A3232 and 310A3501 that are traceable to national or international standards. The volume in the Blank Vial is a vital aspect of method traceability and is confirmed using method 310A4512. In addition, each Sample Solution is tested gravimetrically using method 310A3279.



PCS Reagent Kit



CRM's



Weights



Traceable to national or international standards

Weights & CRM's certified