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CERTIFICATE OF ANALYSIS

Product: **Conductivity standard, 12880 µS/cm (25 °C)**, KCl 0,1 mol/l

PA0102

Batch 17063401
Quality release date 22/03/2016
Expiry date 3/2019

Analysis	Batch value	Specifications
conductivity (25 °C)	12892 µS/cm	12820 - 12940 µS/cm
uncertainty	< 1%	< 1%

Preparation
Conductivity standard solutions are prepared using gravimetrically procedures. The solution has been equilibrated with atmospheric carbon dioxide after preparation.
Composition per liter is Potassium Chloride 0,1 mol.

Temperature dependence of the conductivity value
The electrolytic conductivity is strongly influenced by the temperature. It is therefore necessary to refer to the table below for an accurate control of conductivity values.

T(ºC)	κ (µS/cm)
15	10439
20	11664
25	12880
30	14112
35	15392
40	16678

Traceability
This conductivity standard is traceable to the SRM from NIST.
SRM 999c Potassium Chloride (primary chemical)

Uncertainty
It characterises the dispersion of the values that could be attributed to the mesurand. The limits of the expanded uncertainty are given at a confidence level of 95% (k=2).

Measurement
The standard has been measured with an electrode, whose cell constant is approx. 9,4 cm-1, and a temperature sensor.

Storage and use
This conductivity standard solution is intended for use as a calibration standard for the determination of the conductivity cell constant.
Take care in avoiding air bubbles at the electrode during measurement.
If the product is stored and unopened, this solution is stable for 3 years from the date of manufacturing.
Once the bottle is opened, store tightly closed at room temperature away from acid fumes, nitrogen oxides and sulfur dioxide. Each time the bottle is opened, a portion of the solution will evaporate, which will change the conductivity.
Never introduce the electrode in the bottle for measurements.
Never pour the used solution back in the bottle.

M. Canet
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