

**PRODUCT INFORMATION**  
LABORATORY ANALYSIS  
ELECTROCHEMISTRY  
BUFFERS & STANDARDS



On site: SINGLET buffer solutions in practical single dose pouches. Also available for calibrating process probes



For routine analyses: Ready-to-use, colour-coded buffer solutions and buffer powder pillows

## Buffer and standard solutions for laboratory and field analysis

- **Wide selection of concentrations and package sizes**
- **DKD accredited production (Deutscher Kalibrierdienst) is a German accreditation body**
- **Traceable to NIST standard reference materials**
- **For HQD, METERLAB and SENSION instruments**

### Reliable results

Whether in the laboratory or in the field, correct measurement results are essential. The basis for accurate measurements is good care and calibration of the electrodes. As well as proper handling, the standard solutions that are used are key.

HACH LANGE offers a large number of high quality buffer and standard solutions for pH and conductivity.

The laboratory in Berlin where these solutions are prepared is DKD – accredited, giving them the seal of approval.

### Certified standards

The certified IUPAC standards in airtight boxes have a shelf life of 4 years if unopened and can be used to achieve maximum accuracy.

A DKD approved calibration certificate is available for each batch.

The colour-coded buffer solutions in 500 ml bottles are attractively priced all-rounders for almost every situation. Anyone carrying out occasional measurements in the lab or in the field will appreciate the practical SINGLET 1 unit dose pouches.



# Standard pH buffer and conductivity solutions

## PH BUFFER SOLUTIONS

Name	Description	Quantity	Art. no.
<b>Certified pH standards in accordance with IUPAC</b>			
Supplied in airtight boxes; guaranteed shelf life in unopened condition: 4 years; with DKD certificate; traceable to NIST standard reference materials; accuracy $\pm 0.010$ pH (25°C)			

pH 1.679		500ml	S11M001
pH 4.005		500ml	S11M002
pH 7.000		500ml	S11M004
pH 10.012		500ml	S11M007

## High quality buffer solutions

Ready to use; with and without colour-coding \*

pH 4.01	Red	500ml	2283449
pH 7.00	Yellow	500ml	2283549
pH 10.01	Blue	500ml	2283649
pH 4.01	Colourless	500ml	1222349
pH 7.00	Colourless	500ml	1222249
pH 10.00	Colourless	500ml	1222149
pH 1.09	Technical grade, conforms to DIN 19267	500ml	S11M009
pH 4.65	Technical grade, conforms to DIN 19267	500ml	S11M010
pH 9.23	Technical grade, conforms to DIN 19367	500ml	S11M011

## Buffer powder pillows

Individually sealed, for 50ml buffer solution; with and without colour-coding \*

pH 4.01	Red	50/pk	2226966
		250/pk	2226964
pH 7.00	Yellow	50/pk	2227066
		250/pk	2227064
pH 10.00	Blue	50/pk	2227166
		250/pk	2227164

## SINGLET buffer solutions

In airtight, colour-coded, individual 25ml pouches \*

pH 7.00 and pH 10.01	Yellow + Blue	2x 10/pk	2769820
pH 4.01 and pH 7.00	Red + Yellow	2x 10/pk	2769920
pH 4.01	Red	20/pk	2770020
pH 7.00	Yellow	20/pk	2770120
pH 10.01	Blue	20/pk	2770220

## CONDUCTIVITY STANDARD SOLUTIONS

Name	Description	Quantity	Art. no.
<b>Standards with certificate</b>			
Supplied in an airtight box; guaranteed shelf-life; with certificate; traceable to NIST standard reference materials			

KCl 1 D	111.3mS/cm $\pm 0.5\%$	500ml	S51M001
KCl 0.1 D	12.85mS/cm $\pm 0.35\%$	500ml	S51M002
KCl 0.01 D	1,408 $\mu$ S/cm $\pm 0.5\%$	500ml	S51M003
NaCl 0.05%	1,015 $\mu$ S/cm $\pm 0.5\%$	500ml	S51M004

## NaCl solutions

85.47mg/l as NaCl	180 $\pm 10\mu$ S/cm	100ml	2307542
491mg/l as NaCl	1,000 $\pm 10\mu$ S/cm	100ml	1440042
1,000mg/l as NaCl	1,990 $\pm 20\mu$ S/cm	100ml	210542
10,246mg/l as NaCl	18,000 $\pm 50\mu$ S/cm	100ml	2307442

## Molar KCl solutions

KS910	12.88mS/cm	500ml	C20C250
KCl 0.1 M			
KS920	1.413mS/cm	500ml	C20C270
KCl 0.01 M			
KS930	146.9 $\mu$ S/cm	500ml	C20C280
KCl 0.001 M			

\* Buffer traceable to NIST standard reference materials, accuracy  $\pm 0.02$  pH (25°C); additional concentrations on request



Formulated in accordance with IUPAC requirements: Certified standards for pH and conductivity