

**List of certified reference materials (CRM) according to ISO 17034 offered in the accredited range
D-RM-15186-01**

Certified Reference Materials / pH reference solids

Product	characteristic property	Nominal value at 25 °C	CRM Number	Buffer substances	Characterization strategy
pH reference solid	pH value	1,67 ₉	ZMK-CRM-pH-168-S	potassium tetraoxalate	a)
pH reference solid	pH value	4,00 ₅	ZMK-CRM-pH-401-S	potassium hydrogen phthalate	a)
pH reference solids	pH value	6,86 ₅	ZMK-CRM-pH-686 I-S	potassium dihydrogen phosphate	a)
			ZMK-CRM-pH-686 II-S	disodium hydrogen phosphate	
pH reference solids	pH value	7,41 ₃	ZMK-CRM-pH-741 I-S	potassium dihydrogen phosphate	a)
			ZMK-CRM-pH-741 II-S	disodium hydrogen phosphate	
pH reference solid	pH value	9,18 ₀	ZMK-CRM-pH-918-S	sodium tetraborate decahydrate	a)
pH reference solids	pH value	10,01 ₂	ZMK-CRM-pH-1001 I-S	sodium carbonate	a)
			ZMK-CRM-pH-1001 II-S	sodium bicarbonate	

Certified Reference Materials / pH reference solutions

Product	characteristic property	Nominal value at 25 °C	CRM Number	Composition	Characterization strategy
pH reference solution	pH value	1,67 ₉	ZMK-CRM-pH-168-L	aqueous solution of potassium tetraoxalate	a)
pH reference solution	pH value	4,00 ₅	ZMK-CRM-pH-401-L	aqueous solution of potassium hydrogen phthalate	a)
pH reference solution	pH value	6,86 ₅	ZMK-CRM-pH-686-L	aqueous solution of potassium dihydrogen phosphate and disodium hydrogen phosphate	a)
pH reference solution	pH value	7,41 ₃	ZMK-CRM-pH-741 I-L	aqueous solution of potassium dihydrogen phosphate and disodium hydrogen phosphate	a)
pH reference solution	pH value	9,18 ₀	ZMK-CRM-pH-918-L	aqueous solution of sodium tetraborate decahydrate	a)
pH reference solution	pH value	10,01 ₂	ZMK-CRM-pH-1001-L	aqueous solution of sodium carbonate and sodium bicarbonate	a)
pH reference solution	pH value	6,0 ₀	ZMK-CRM-pH-600-L	aqueous solution of disodium hydrogen phosphate and citric acid monohydrate	a)
pH reference solution	pH value	7,0 ₀	ZMK-CRM-pH-700-L	aqueous solution of potassium dihydrogen phosphate and disodium hydrogen phosphate dihydrate	a)
pH reference solution	pH value	8,0 ₀	ZMK-CRM-pH-800-L	aqueous solution of disodium hydrogen phosphate and citric acid monohydrate	a)
pH reference solution	pH value	9,2 ₁	ZMK-CRM-pH-921-L	aqueous solution of sodium carbonate and sodium bicarbonate	a)

Certified Reference Materials / Conductivity standard solutions

Product	characteristic property	Nominal value at 25 °C	CRM Number	Composition	Characterization strategy
Conductivity standard solution	Electrolytic conductivity	1,3 µS/cm	ZMK-CRM-EC-1	aqueous solution of potassium chloride and glycerol	a)
Conductivity standard solution	Electrolytic conductivity	84 µS/cm	ZMK-CRM-EC-84	aqueous solution of potassium chloride	a)
Conductivity standard solution	Electrolytic conductivity	147 µS/cm	ZMK-CRM-EC-147	aqueous solution of potassium chloride	a)
Conductivity standard solution	Electrolytic conductivity	1000 µS/cm	ZMK-CRM-EC-1000	aqueous solution of potassium chloride	a)
Conductivity standard solution	Electrolytic conductivity	1413 µS/cm	ZMK-CRM-EC-1413	aqueous solution of potassium chloride	a)
Conductivity standard solution	Electrolytic conductivity	12,88 mS/cm	ZMK-CRM-EC-12,88	aqueous solution of potassium chloride	a)
Conductivity standard solution	Electrolytic conductivity	50 mS/cm	ZMK-CRM-EC-50,0	aqueous solution of potassium chloride	a)
Conductivity standard solution	Electrolytic conductivity	111,8 mS/cm	ZMK-CRM-EC-111,8	aqueous solution of potassium chloride	a)

a) The use of a single reference measurement method (as defined in ISO/IEC Guide 99) in a single laboratory in accordance with DIN EN ISO 17034:2017 Par. 7.12.3 Note 1a).