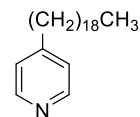


Product Information



95295 Hydrogen ionophore II

(ETH 1907;4-Nonadecylpyridine)
Selectophore®, function-tested

Electrochemical Transduction

Ion-selective Electrodes

Application 1 and Sensor Type¹

Assay of H⁺ activity with solvent polymeric membrane electrode based on Hydrogen ionophore II. Applications evaluated for aqueous solutions only.

Recommended Membrane Composition

1.0 wt%	Hydrogen ionophore II (95295)
1.0 wt%	Potassium tetrakis(4-chlorophenyl)borate (60591)
68.0 wt%	2-Nitrophenyl octyl ether (73732)
30.0 wt%	Poly(vinyl chloride) high molecular weight (81392)

Recommended Cell Assembly

Reference || sample solution || liquid membrane | buffer pH 5.6 | AgCl, Ag

Electrode Characteristics and Function

Selectivity coefficients $\log K_{H,M}^{Pot}$ as obtained by the fixed interference method on pH-buffered solutions.

$\log K_{H,Li}^{Pot}$	<-9.7	$\log K_{H,K}^{Pot}$	-7.5
$\log K_{H,Na}^{Pot}$	-8.8		

Slope of linear regression:	58.1±0.4 mV (pH 1.3-9.0)
Practical pH measuring range (pH-buffered solutions, ion background of 140 mM Na ⁺):	1.3-9.8

¹ Optimum composition of neutral carrier based pH electrodes. E. Bakker, A. Xu, E. Pretsch, Anal. Chim. Acta, 295, 253 (1994).

