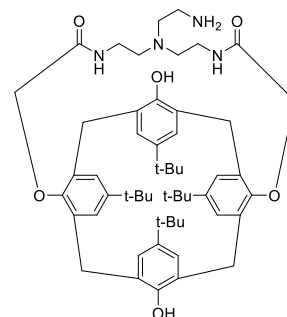


Product Information



16979 Hydrogen ionophore V

(Calix[4]-aza-crown)

Selectophore®, function-tested

Electrochemical Transduction

Ion-selective Electrodes

Application 1 and Sensor Type¹

Liquid membrane pH sensor based on Hydrogen ionophore V exhibited high selectivity over alkali metal ions.

Recommended Membrane Composition

0.88 wt%	Hydrogen ionophore V (16979)
0.23 wt%	Sodium tetrakis(4-fluorophenyl)borate dihydrate (72014)
65.93 wt%	2-Nitrophenyl octyl ether (73732)
32.96 wt%	Poly(vinyl chloride) high molecular weight (81392)

Recommended Cell Assembly

Reference || sample solution || ion-selective electrode | potassium phosphate buffer pH 6.9 | AgCl, Ag

Electrode Characteristics and Function

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

$\log K_{H,Li}^{Pot}$	<-11.2
$\log K_{H,Na}^{Pot}$	<-11.0
$\log K_{H,K}^{Pot}$	<11.0

Slope of linear regression:	54 mV/dec (pH 2.5-11.5)
Dynamic pH measuring range:	2.5-11.5
Response time:	<10 s

¹ Potentiometric liquid membrane pH sensors based on calix[4]-aza-crowns. X.J. Liu, B. Peng, F. Liu, Y. Qin, Sens. and Act. 125, 656 (2007).

