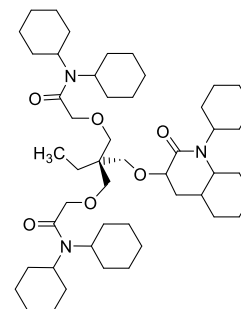


Product Information



62571 Lithium ionophore VIII

(*N,N,N',N',N'',N''*-Hexacyclohexyl-4,4',4''-propylidynetris(3-oxabutamide))

Selectophore®, function tested

Electrochemical Transduction

Ion-Selective Electrodes

Application 1 and Sensor Type¹

Sensor with increased stability and lifetime for assay of Li⁺ based on Lithium ionophore VIII.

Recommended Membrane Composition

2.50 wt%	Lithium ionophore VIII (62571)
0.23 wt%	Potassium tetrakis((4-chlorophenyl)borate (60591))
64.50 wt%	Bis(1-butylpentyl) adipate (02150)
32.80 wt%	Poly(vinyl chloride) high molecular weight (81392)

Recommended Cell Assembly

Reference || sample solution || liquid membrane | 0.01 M LiCl | AgCl, Ag

Electrode Characteristics and Function

Selectivity coefficients $\log K_{Li,M}^{Pot}$ determined by the separate solution method (0.1 M solutions of the chlorides).

$\log K_{Li,Na}^{Pot}$	-2.4	$\log K_{Li,Mg}^{Pot}$	-4.3
$\log K_{Li,K}^{Pot}$	-2.3	$\log K_{Li,Ca}^{Pot}$	-4.4
$\log K_{Li,NH_4}^{Pot}$	-3.0		

Slope of linear regression:

59-60 mV/dec

¹ Performance of a highly lipophilic Li⁺ ionophore in solvent polymeric membranes. M. Bochenska, W. Simon, Microchim. Acta III, 277 (1990).

