

Table 7 Translocation rate constants and partition coefficients of lipophilic ions in nerve membranes and lipid bilayers

Membrane	Ion	k, (s ⁻¹)	β _m , (m)	Reference
Squid axon ^a	DPA ⁻	7000	2 × 10 ⁻⁵	6
Frog nerve ^a	DPA ⁻	11000	4.7 × 10 ⁻⁵	7
Monoolein ^b	DPA ⁻	8530	1.3 × 10 ⁻⁵	5
Dioleyl-PC	DPA ⁻	8470	22 × 10 ⁻⁵	5
Squid axon ^a	TPhB ⁻	450	0.5 × 10 ⁻⁵	6
Monoolein ^b	TPhB ⁻	550	0.32 × 10 ⁻⁵	

^a T = 13°C

^b solvent-free T = 25°C

5. Benz, R. and Lauger, P., Transport kinetics of dipicrylamine through lipid bilayer membranes, *Biochim. Biophys. Acta* 468, 245–258 (1977).
6. Benz, R. and Conti, F., Structure of the squid axon membrane as derived from charge-pulse relaxation studies in the presence of absorbed lipophilic ion, *J. Membr. Biol.* 59, 91–104 (1981).
7. Benz, R. and Nonner, W., Structure of the axolemma of frog myelinated nerve: relaxation experiments with a lipophilic probe ion, *J. Membr. Biol.* 59, 127–134 (1981).