

Table 2. Permeability coefficients (P_m) for various nonelectrolyte solutes across egg lecithin bilayer membranes at 25°C

Permeant	V (Å ³) ^a	P_m (cm/sec)
1 Water	20.6	(1.9 ± 0.9) × 10 ⁻³
2 Formic acid	38.5	(2.9 ± 0.1) × 10 ⁻³
3 Acetic acid	55.5	(5.0 ± 0.2) × 10 ⁻³
4 Acetamide	59.7	(2.9 ± 0.3) × 10 ⁻⁴
5 Butyric acid	89.5	(1.0 ± 0.2) × 10 ⁻¹
6 Adenine	107	(1.38 ± 0.02) × 10 ⁻⁵
7 Benzoic acid	108	(5.7 ± 0.5) × 10 ⁻¹
8 <i>p</i> -Toluic acid	125	1.1 ± 0.2
9 α -Hydroxy- <i>p</i> -toluic acid	133	(1.6 ± 0.4) × 10 ⁻³
10 α -Chloro- <i>p</i> -toluic acid	139	(6.4 ± 0.1) × 10 ⁻¹
11 α -Cyano- <i>p</i> -toluic acid	144	(2.7 ± 0.5) × 10 ⁻²
12 α -Methoxy- <i>p</i> -toluic acid	148	(3.5 ± 0.1) × 10 ⁻¹
13 β -Naphthoic acid	149	(1.7 ± 0.2) × 10 ¹
14 α -Naphthoic acid	149	2.3 ± 0.6
15 α -Carboxy- <i>p</i> -toluic acid	152	(1.8 ± 0.3) × 10 ⁻⁴
16 α -Carbamido- <i>p</i> -toluic acid	157	(4.1 ± 0.4) × 10 ⁻⁵
17 9-Anthroic acid	190	3.2 ± 0.8
18 2',3'-Dideoxyadenosine	195	(6.3 ± 0.1) × 10 ⁻⁵
2',3'-Dideoxyinosine		<10 ⁻⁶
2',3'-Dideoxyguanine		<10 ⁻⁶
19 2'-Deoxyadenosine	203	(9.4 ± 0.7) × 10 ⁻⁷
20 Prednisolone	309	(1.5 ± 0.6) × 10 ⁻⁴
21 Hydrocortisone	316	(5.6 ± 0.3) × 10 ⁻⁴
22 Hydrocortisone-21-pimelamide	452	(1.8 ± 0.5) × 10 ⁻⁴

^a Molecular volume calculated by the atomic increment method (Edward, 1970).