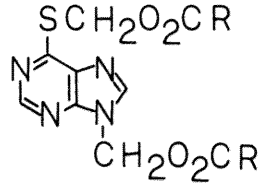
Table 13.3 Solubilities of S^6,9-Bis-acyloxymethyl-6-mercaptopurine (6,9-bis-6-MP) Derivatives, the Fluxes ($J_i^{s,v}$) and Log Permeability Coefficients (log $P_i^{s,v}$) for the Delivery of 6-Mercaptopurine (6-MP) by the Derivatives from Isopropyl Myristate (IPM), Propylene Glycol (PG) and Water



Derivative, R = /vehicle	Solubility[a]	$J_i^{s,v}$, [b] mg/cm^{2}h × 10^3 (± SD)		log $P_i^{s,v}$, cm/h
1, 6-MP/IPM[c]	0.0034	0.60	(0.30)	− 0.73
2, R = CH_3/IPM	0.80	34.5	(2.8)	− 1.36
3, R = C_2H_5/IPM	5.11	35.2	(9.9)	− 2.16
4, R = C_3H_7/IPM	13.8	21.5	(5.4)	− 2.81
5, R = C_4H_9/IPM	26.5	15.5	(7.4)	− 3.23
6, R = C_5H_{11}/IPM	7.56	1.75	(0.44)	− 3.63
7, R = C_7H_{15}/IPM	2.60	0.19	(0.014)	− 4.14
8, R = $C(CH_3)_3$/IPM	31.4	5.48	(0.55)	− 3.76
1, 6-MP/PG[c]	6.2	0.093	(0.0060)	− 4.82
2, R = CH_3/PG	2.79	0.58	(0.04)	− 3.68
3, R = C_2H_5/PG	8.63	1.95	(0.28)	− 3.65
4, R = C_3H_7/PG	9.54	1.60	(0.050)	− 3.76
5, R = C_4H_9/PG	8.32	0.77	(0.060)	− 4.03
6, R = C_5H_{11}/PG	1.71	0.18	(0.045)	− 3.99
1, 6-MP/H_2O[c]	0.17	0.36	(0.21)	− 2.68