

Table 13.1 The Effect of Single Component Vehicles on the Delivery of Drugs through Hairless Mouse Skin: Solubilities (C_i^V), Fluxes ($J_i^{S,V}$)^a, Permeability Coefficients ($P_i^{S,V}$) and log Theoretical Partition Coefficients ($\log K_i^{S,V}$)^b

Solvent ^c [δ_V ; (cal/cm ³) ^{1/2}]	Solubility (C_i^V), (mg/cm ³)	Flux ($J_i^{S,V}$) [mg/cm ² h × 10 ³ (± SD)]	$P_i^{S,V}$ [cm/h × 10 ³ (± SD)]	$\log K_i^{S,V}$
Theophylline ^d				
IPM (8.5)	0.062	41.2 (3.7)	660.0 (61.0)	1.12
OCT (10.3)	1.70	547.0 (146.0)	320.0 (86.0)	- 0.18
DMF (12.1)	34.6	17.0 (4.0)	0.49 (0.12)	- 0.98
PG (14.8)	8.07	1.54 (0.31)	0.19 (0.04)	- 1.22
EG (16.1)	7.40	1.94 (0.72)	0.26 (0.10)	- 0.92
FOR (17.9)	1.57	3.69 (0.25)	2.35 (0.16)	- 0.06
Salicylic acid ^e				
OA (7.6)	30.3	640 (69)	21.2 (2.3)	1.74 (0.68)
IPM (8.5)	41.4	870 (190)	21.0 (4.7)	0.91 (0.34)
OCT (10.3)	145	1600 (60)	11.2 (0.4)	- 0.39 (- 0.027)
PRO (12.0)	228	1090 (55)	4.8 (0.25)	- 1.04 (0.00)
PG (14.8)	207	430 (41)	2.1 (0.20)	- 1.30 (0.66)